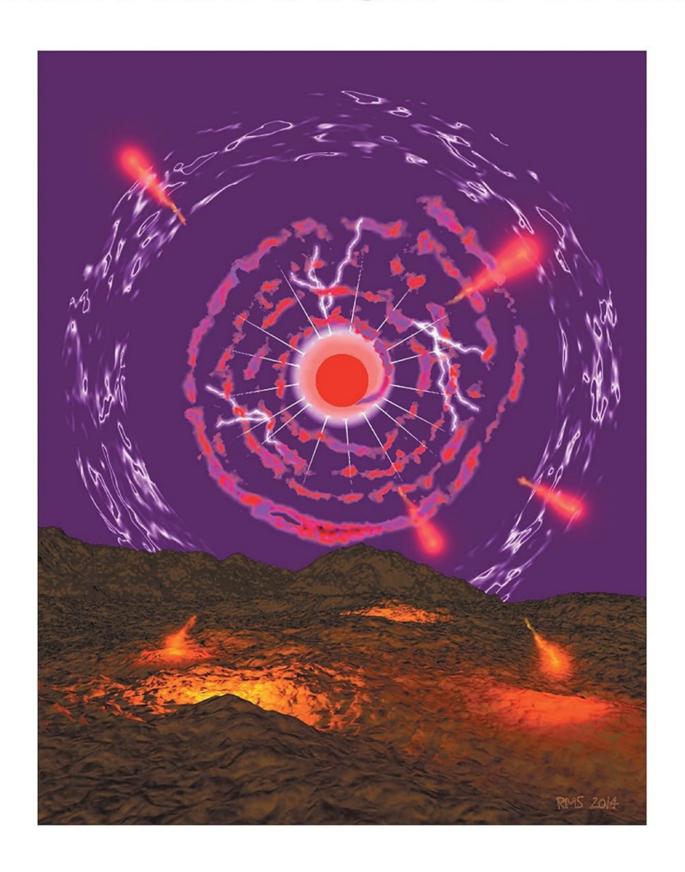
neuborn star



DUIARDU CARDONA

The cosmic events that led to the organization of the Solar System in which Earth now resides are briefly recounted in this work with inclusions from recent astronomical discoveries that continue to lend support to the unfolding theory presented in this work.

What is then additionally discussed are the catastrophic repercussions that followed Earth's intrusion into the present Sun's domain of influence, some of which events actually proved to be beneficial despite wholesale slaughter and mutational evolution of most of Earth's inhabitants including humanity itself.

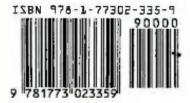
Among various other matters, what this also involved was the transmutation of vegetation which led entire societies to adopt farming in lieu of wandering in search of edible crops, a move that culminated in permanent settlements some of which eventually turned into major centers of civilization, even though it was not all that beneficial.

In the meantime, up in the sky a new cosmic body appeared in conjunction with Earth's primordial sun which the ancients considered to have been the self-begotten daughter of their former sole divinity. This gave rise to diverse assessments concerning both the character and the involvement of this newly visible goddess in relation to what eventually became known as the Creation.

From an astronomical point of view, the plasmatic pinches that led to this equivocal situation are also discussed despite certain uncertainties that continue to litter plasma cosmology.

Mytho-historically speaking, it also indicates that God created woman long before he fashioned man.





Newborn Star

Dwardu Cardona

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By the same author:

God Star (2006)

Flare Star (2007)

Primordial Star (2009)

Metamorphic Star (2011)

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Reviews:

"Once I had God Star in my hands I could scarcely put it down. This is the most complete and articulate book on the topic I have read. It is a complete history...of the nature of ... the Solar System as it once was at a time when mankind was present to record it... God Star delineates mythology from fable, setting the former as a true field of scientific enquiry. From God Star springs forth topic after topic on the physical conditions and processes our planet has undergone..."

Anthony L. Peratt, B.S.E.E., M.S.E.E., Ph.D (Former Scientific Advisor, United States Department of Energy)

"Flare Star is essential reading for anyone interested in geology, archaeology, paleontology, and/or the recent history of the Solar System. Cardona correlates information from astronomers, geologists, plasma scientists, and from comparative mythologists to demonstrate that they use different methods but come to many similar conclusions. He notes several known problems in science that are not often stressed outside the scientific community and then provides possible explanations to said problems with one basic assumption concerning the original plasma environment around Earth...Although Cardona's God Star was first in the series...a reader would not be lost starting with Flare Star. They compliment each other and both are very important books."

C. J. Ransom, Ph.D (Plasma Physicist, University of Texas at Austin)

Primordial Star: "Cardona's work explains so many of the mysteries and anomalies of planetary science and history in a coherent and logical model. It seems that plasma and electromagnetism probably hold the key to our past as well as our future, and that the history of this planet is nothing like that portrayed by conventional wisdom. I can't recommend this book strongly enough."

David Drew

Metamorphic Star: Cardona continues to carefully catalogue and analyse the latest evidence for his unique cosmology while answering some of his critics. For those familiar with Cardona's previous works, the accumulating evidence of the last four to five years in support of his main hypothesis makes this latest volume a necessary one for those consolidating their understanding of Cardona's comprehensive take on the Saturn Theory. As for those who have just recently discovered this fascinating retake on Earth's cosmological history, this fourth volume in an ongoing series goes a long way in unifying many of the themes discussed in his previous volumes. It's best to read all volumes in sequence, but Metamorphic Star will definitely appeal to those still coming to terms with Cardona's basic premise, particularly the concept of Saturn's late arrival into our current Solar System with a primordial Earth in tow—and the evidence just keeps building up.

Troy D. McLachlan

To Gaylia, my wife, the radiant star in my life.

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In alphabetical order:

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Further gratitude must go to Lewis M. Greenberg for permission to use lengthy excerpts from my own published works as they appeared throughout the years in the journal *Kronos* of which he was the Editor-in Chief.

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Part One

In the Beginning

THE PRIMAL MYTH

ccording to various translations of the Old Testament, God was responsible for the creation of both heaven and Earth. This has not only been one of the most revered dogmas of the Judeo-Christian faith, it is likewise to be found at the root of just about all religions, old and new.

Marinus van der Sluijs has gone on record in stating that "not all mythology is creation mythology," which is quite true. Even so, as Fred Gladstone Bratton rightly stated: "Creation myths are the most widespread of all myths." Let it then be said right here that there is no way to survey each and every one of them throughout this work.

David Talbott hit the nail right on the head when he additionally wrote that a "review of the oldest versions of creation will show that few if any mythical themes have been more misunderstood." The only thing I will add is that this does not only apply to "the oldest versions of creation," but just about to all of them.

One complicated problem that this involves is that, very much like Joseph Campbell, some mythologists claim that all origin myths "are actually false," while a slew of others assume that the originals of these myths refer to the creation of the Earth or, what is even worse, the Universe. Even among those, like Mircea Eliade, who do not believe that the event in question really came to pass, they still contend that, as far as ancient man himself was concerned, the event "really happened," that it "took place," and that it did so "in the plain sense of the term."

One need not be the proverbial rocket scientist to realize that man, who was not around when Earth came into being, could not have seen it form, let alone the Universe. Why, then, as David Talbott noted from the very beginning of his research into these matters, did ancient man describe the creation of the world as if he had seen it all unfold with his very own eyes? Did he really delude himself into thinking that it developed out of nothing? Did God, as some maintain, later tell some holy man how he created the world before he actually created him?

The above questions have a tendency to raise others, so let us first get some things straight.

¹ Genesis 1:1.

² M. A. van der Sluijs, "Plasma Mythology—A Research Programme," Chronology & Catastrophism Review (2010), p. 3.

³ F. G. Bratton, Myths and Legends of the Ancient Near East (N. Y., 1970), p. 12.

⁴ D. Talbott, "Reconstructing the Saturn Myth," AEON 1:1 (January 1988), p. 13.

⁵ J. Campbell, The Masks of God: Occidental Mythology (N. Y., 1964), p. 95.

⁶ D. Talbott, loc. cit.

⁷ M. Eliade, Myths, Dreams and Mysteries (London, 1957), p. 15.

⁸ See here, for instance, F. Warshofsky, *Doomsday*; The Science of Catastrophe (N. Y., 1977), p. 69.

⁹ J. Gibson, "Saturn's Age," Research Communications NETWORK (October 15, 1977), p. 3.

DOCTRINES OF NON-ORIGIN

As far as ancient sources are concerned—and that includes the Old Testament itself—reports of a Creation that unraveled out of nothing are somewhat rare, even though they do exist. True, there have been quite a few mythologists who have positively claimed that no reports of a Creation out of nothing exist anywhere in the world. Thus, according to Hans Bellamy, despite the "immense number of creation myths," he found reason to claim that mythologists "cannot point to a single one" that actually traces the event to "the beginning of things." As far as he was concerned, "creation out of nothing is nowhere thought of."

To be sure, Stephen Langdon was quite right when he noted that, in Sumerian mythology, which constitutes the earliest recorded samples of traditional lore at our disposal, there is "no evidence" of a "considered theory of the creation of the world," if by "the world" is meant the Earth on which we live.

Similar examples can also be found in the literature of later civilizations from the same general region and additionally vouched for by those who came later. Thus, sometime in the first century B. C., the Sicilian historian Diodorus Siculus could write that: "The Chaldeans say that the substance of the world is eternal and that it neither had a first beginning nor that it will at a later time suffer destruction." And yet, as Alexander Heidel noted, the Babylonians, who were the very Chaldeans referred to by Diodorus, "could conceive of a time when there was neither heaven nor earth," but, as he goes on, "apparently" even they "could not conceive of a time when there was nothing whatsoever."

While, in India, Hinduism promotes an endless series of creations and destructions, the competing Jain doctrine contends that "the world is uncreated," as so is "time itself," both of which are without beginning or an end.⁶ As put into the proverbial nutshell by the Jain monk, Jinasena, the world, being both uncreated and indestructible, "endures under the compulsion of its own nature."

Competing Jain doctrine aside, however, there is more than one version of Creation to be found in the intricate mythology of Hinduism, concerning which it can be stated that few of them actually claim that the world had been created out of nothing. Indic scholars will of course point to the *Brihadaranyaka Upanishad* where it is stated that:

"In the beginning this was Self alone, in the shape of a person (Purusha). He, looking around saw nothing but his self. He first said, 'This is I;' therefore he became I by name."

¹ H. S. Bellamy, Moons, Myths and Man (London, 1949), p. 145.

² Ihid.

³ S. Langdon, Semitic Mythology, Vol. V of The Mythology of All Races (N. Y., 1931/1964). p. 277.

⁴ A. Heidel, *The Babylonian Genesis* (Chicago, 1942), p. 76.

⁵ *Ibid.*, (emphasis added). 1

⁶ Jinasena, Mahapurana, as cited by D. Teresi, Lost Discoveries (N. Y., 2002), pp. 177-178, 214.

⁷ *Ibid.*, p. 178.

⁸ Brihadaranyaka Upanishad, as translated by F. M. Müller, as contained in L. Yutang (Ed.), The Wisdom of China and India (N. Y., 1942), p. 34.

The above, however, is a late adaptation of a much earlier Vedic version in which even Purusha is said to have hatched from a pre-existing egg that had been floating on a stretch of pre-existing water.¹

To be sure, the earliest extant Hindu version of Creation, that which is contained in the *Rig Veda*, is purposely abstruse, as the following lines well demonstrate:

"Who verily knows and who can here declare it, whence it was born and whence comes this creation? The gods are later than this world's production. Who knows then whence it first came into being? He, the first origin of this creation, whether he formed it all, or did not form it, whose eye controls this world in highest heaven, he verily knows it, or perhaps he knows it not."²

Even so, convoluted as the tenets of Hinduism can be, ambiguous views can still be cited by those who wish to present contrary interpretations. Thus, translations from Sanskrit literature can still be made to read that, while "the universe was originally formless," it was still "self-created," that it came into being "by itself."

Titus Lucretius Carus, the Roman poet who is often referred to simply as Lucretius, was adamant in his treatise, *De Rerum Natura*, that, even when it comes to divine power, nothing can be created out of nothing.⁴

What can we, however, say about more ancient times? Was primitive man capable of realizing that the world he lived in had always been there? Not according to Te Lin who saw reason to assume that "creation myths are a way for the conscious mind to attempt to explain the infinite and to make sense of a boundless universe." As she goes on: "The conscious mind cannot truly conceive of something that has no beginning."

But was such a sophisticated concept really beyond the mentality of ancient man? We cannot, unfortunately, trespass beyond historic times, but we *can* extrapolate from the traditional lore of presently existing tribal groups. And, as it turns out, contrary to Lin's proclamation, the concept of a non-beginning was not beyond the comprehension of some of the world's primitive cultures.

"Thus among the mountain tribes in the north of Luzon, in Minahassa, in the Palau islands and Western Carolines, all over Melanesia, in certain tales of New Zealand and the Chatham islands, the upper or heavenly world and the terrestrial world are thought to have existed for ever. It is the same in Australia, where the native populations of the north and east seem in addition to have believed generally that there have always been

¹ V. Ions, *Indian Mythology* (London, 1967), p. 25.

² Rig Veda X: cxxix: 6-7.

³ S. W. Carey, *Theories of the Earth and Universe* (Stanford, California, 1989), p. 338.

[&]quot; Ibid.

⁵T. Lin, Chinese Myths (London, 2001), p. 13.

⁶ Ibid.

men, and that from the very beginning the animals always had their present characteristics."

"Creation," according to most Australian Aborigines, "merely moulds [or molded] what was already there: the idea that the land might once not have existed seems quite simply unimaginable."²

One can hardly find a race more different from the natives of the Pacific islands and/or Australia, mentioned above, than the Eskimos of the Arctic regions, and yet they, too, held on to similar beliefs. Although, as Marion Wood informs us, there was disagreement among these Arctic people concerning the manner in which the world had been formed, a fair portion of these indigenes continued to believe that it always had been there.³ So, likewise, with the primitive ancestors of the Tungus in Siberia who were also of the belief that what is usually mistranslated as "the Universe" had always been around.⁴

If such primitive cultures could grasp the philosophical notion of there having been no genesis to existence, so could our own ancient ancestors come to that realization prior to the sophisticated civilizations that rose in the Fertile Crescent, the Nile Valley, the islands of Greece and elsewhere around the world.

CREATIO EX NIHILO

Despite all the above, as already noted, Creation was believed by some to have transpired out of nothing, just as in Christianity it still is. And, to be sure, the same was true of at least some of the Hellenistic Jews from Alexandria, Egypt, in the first century of the present era. This can be gleaned from *The Book of the Secrets of Enoch* that was written around that time in which God is said to have "created all things from nonexistence into existence, and from invisible into visible."

But even far from Biblical lands and people, Creation out of nothing continued to be adhered to well into present times. And this even included members in those very societies among which others did not so believe. Thus, for instance, some of the societies from the Pacific islands mentioned above did believe that man himself had been created.⁷ Others were also in possession of a handful of myths that actually proclaimed the creation of the world.⁸

¹ G. H. Luquet, "Oceanic Mythology," New Larousse Encyclopedia of Mythology (London, 1972), pp. 456-457; see also, T. Allan, "An Unseen World," in C. Westhorp (Ed.), Journeys Through Dreamtime (Amsterdam, 1999), p. 16.

² M. Kerrigan, "A Timeless Land," Journeys Through Dreamtime (Amsterdam, 1990), p. 23.

³ M. Wood, Spirits, Heroes & Hunters from North American Indian Mythology (N. Y., 1981), p. 17.

⁴ E. C. Krupp, Skywatchers, Shamans & Kings (N. Y., 1997), p. 36.

⁵ See, for instance, N. J. G. Sykes, "The Paradigm of the Electric Universe," *Proceedings of the Natural Philosophy Alliance*, Vol. 8 (July 2011), p. 610.

⁶ The Book of the Secrets of Enoch, also known as 2 Enoch, as reproduced by W. Barnstone, The Other Bible (N. Y., 1984), p. 4.

⁷ F. Fleming, "The Myriad Beliefs of Melanesia," in *ibid.*, p. 82.

⁸ Ibid.

The ancient Persians seem to have had no difficulty in believing that Ahura Mazda, the god of light, "created the world from nothing." That, at least, had been the teaching of the religious reformer Zoroaster—also rendered Zarathustra—(628-551 B.C.)

As noted, while rare, we do meet the odd Hindu claim of *creatio ex nihilo*. "Verily, states the *Satapatha Brahmana*, "in the beginning there was here the non-existent." And from the *Chandogya Upanishad*: "In the beginning this was non-existent. It became existent. It grew."

Far from India in both time and distance, the Hopi of North America believed, as some still do, that there originally had been nothing besides the one who brought it all into existence.

"But first, they say, there was only the creator, Taiowa. All else was endless space. There was no beginning and no end, no time, no shape, no life. Just an immeasurable void that has its beginning and end, time, shape, and life in the mind of Taiowa the Creator."

And so, likewise, in Central America among the Maya who were steadfast in their belief that "there was neither heaven nor earth" when the demiurge uttered his first creative word.⁵

BANGING INTO BEING

The belief in creation out of nothing, however, is not restricted to religion, past or present. The same is preached by the Big Bang theory as proclaimed by the present majority of cosmologists. The similarity between the scientific concepts of this hypothesis and the account contained in *Genesis* has long been noted.

"Prevailing scientific theory proposes that the universe was created in a flash of light. This 'big bang,' or cosmic explosion, is believed to have occurred some 16 billion years ago. Some see parallels between this modern, scientific theory and the biblical account which opens with God's command, 'Let there be light'."

Never mind parallels. Writing much earlier, in 1956, Zsolt Aradi, who served as one of various Catholic writers for the Vatican, was already maintaining that, despite the ridicule that many have heaped upon theology and the Old Testament, "theories of modern cosmology agree with even the minutest details of the Biblical account about the creation of the universe."

There was also Isaac Asimov, who is better known for his science fiction than his science. He, too, was swayed into paying homage to Biblical fundamentalists by displaying similar beliefs. He found it quite "dramatic to imagine" that the light heralding the Creation as narrated in the Book of *Genesis* is merely a reflection—pun not intended—of the light that

¹ C. A. Burland, Myths of Life & Death (N. Y., 1974), p. 193.

² Satapatha Brahmana VI: 1: 1: 1.

³ Chandogya Upanishad IV: 19: 1.

⁴ F. Waters, *Book of the Hopi* (N. Y., 1974), p. 3.

⁵ I. Nicholson, Mexican and Central American Mythology (London, 1967), p. 20.

⁶ A. E. Guinnes (ed.), Mysteries of the Bible (N.Y., 1988), p. 18.

⁷ Z. Aradi, *The Book of Miracles* (Derby, Connecticut, 1956/1961), p. 256 (emphasis added).

foreshadowed the Big Bang. "In fact," he wrote, "we might paraphrase the first three verses of Genesis...to make them fit the scientific view of the beginning of the Universe."²

So, similarly, with the Israeli nuclear physicist Gerald Schroeder whose religious leanings, even when it comes to science, are well known, as a survey of his published books well illustrates. As he had it stated in Genesis and the Big Bang, which he published in 1990, no contradiction is to be found between the unraveling of Creation as described in Genesis and the current scientific dictum.³

In addition to Genesis, Schroeder also appealed to Rabbi Moshe ben Nachman, otherwise known as "the Ramban," whose medieval commentary on the Old Testament "had the remarkably modern insight that at the moment after creation, all the matter in the universe must have been concentrated in a tiny speck."4

The close similarity of the Big Bang theory to the Genesis account of God's creation should not be wondered at since the theory was itself fashioned in accordance with that very concept. This might come as a surprise to some, and contested by various others, but not to those who are familiar with how it all came to pass, including readers to the prequels of this

As is well known, the theory owes its origin to Georges Lemaître, the Belgian priest and physicist, who relied on Einstein's theories of relativity together with the belief that the galaxies were receding from each other at an incredible speed. What this implied to him is that, at some point in the astronomical past, all the galaxies in existence and the stars within their confines had to have occupied the same spot in space. In other words, all that came into being must have originally been condensed in a speck that was close to nothing. Thus it was that, in 1927, he "galvanized cosmologists" with his proposal that a hot, dense "primeval atom" must have exploded, flinging its contents outward "to create the present universe."⁵

In truth, however, Lemaître had familiarized himself with the Creation myths of other nations, especially those that emphasized the tumbling of matter out of a pre-existing mythical ovum, the acquaintance with which is betrayed by the fact that he himself alluded to the "primeval atom" of his theory as the "cosmic egg," to which we shall come later. Besides which, having been well versed in theology, which was "his other great passion," it is inconceivable that, very much like Schroeder, he would not have come across the Ramban. As the Nobel laureate Hans Alfvén noted, Lemaître's primeval atom theory was an ingenious "synthesis of general relativity and the Thomistic dogma of a creation ex nihilo (although he never expressed this explicitly in his papers)." Alfvén knew what he was talking about since he was there when Lemaître first proposed his theory. According to him, in private, Lemaître

¹ I. Asimov, *In the Beginning* ... (N. Y., 1981), pp. 23-24.

² *Ibid.*, p. 24.

³ R. N. Ostling, "Galileo and Other Faithful Scientists," *TIME* (December 28, 1992), p. 39.

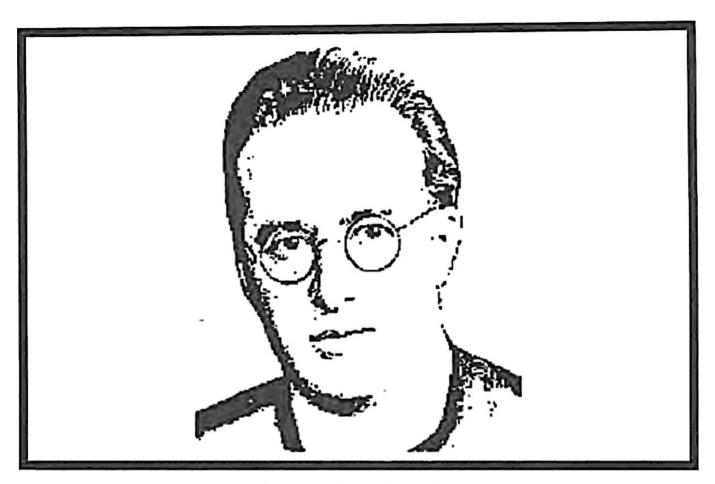
⁵ J. McManus (ed.), *The Cosmos* (Alexandria, Virginia, 1990), pp. 61-62.

⁶ Ibid., pp. 62-63; I. Asimov, op. cit., p. 22; R. W. Wescott, Predicting the Past (Deer-field Beach, Florida, 2000), p. 176.

7 D. Kaiser, "The Other Evolution Wars," American scientist (November-December 2007), p. 518.

⁸ H. Alfvén, Cosmic Plasma (Dordrecht, Holland, 1981), p. 124.

⁹ A. L. Peratt, "Dean of the Plasma Dissidents," The World and I (May 1988), p. 197.



Georges Lemaître-father of the Big Bang theory.

actually admitted that "his theory was a way to reconcile science with St. Thomas Aquinas' theological dictum" of "creation out of nothing." In fact, an early draft of his proclaimed that "everyone who believes in a supreme being" would be "glad" at the congruence this theory brings between science and religion, which words he excised from his paper just prior to publication. Even so, in an article he published in *Nature* in 1931, he exhibited no aversion in stating that the cosmos was born on "a day without yesterday."

It was, therefore, not surprising when the Vatican decorated Lemaître for his scientific achievements. It was not, however, just the Vatican. Belgium itself saw fit to honor him with its highest scientific award, the Francqui Prize, in addition to the *Croix de Guerre* he had already received for his distinguished service in the army during World War I.

Albert Einstein was not at first impressed, nor did he attempt to hide this fact when he met Lemaître in October 1927. "Your calculations are correct," he told him, "but your grasp of

¹ Ibid.

² D. Kaiser, loc. cit.

³ Y. Nazé, "The Priest, the Universe, and the Big Bang," Astronomy (November 2007), p. 42.

⁴ J. McManus, op. cit., p. 61.

⁵ Y. Nazé, op. cit., p. 43.

⁶ Ibid., 41.

physics is abominable." To Arthur Eddington, who was himself a Quaker, as well as others, the very notion that the Universe had a beginning was "repugnant." As the Belgian astrophysicist Yaël Nazé expressed it: "Scientists were uncomfortable with a cosmic origin story because it appeared so close to Christian dogma" to say nothing about its proposal by "a priest."

Unlike Eddington, however, Einstein changed his mind. Five years after he had castigated Lemaître for what he believed to be his abominable grasp of physics, he ended up applauding him. "This," he said of his theory, "is the most beautiful and satisfactory explanation of creation to which I have ever listened." The irony of it all is that Lemaître refined his theory through the introduction of Einstein's cosmological constant, which calls for density and pressure associated with empty space, while Einstein himself eventually came to think of this constant as the greatest mistake of his entire life. A further irony came about when, in 1953, despite Eddington's refutation of his theory, the Royal Astronomical Society awarded Lemaître the very first of its medals named after the very Eddington.

It may be pointed out by some that, in later years, Lemaître "argued strongly against mixing theology and cosmology" and that he was "an especially outspoken critic of biblical literalism." And when Pope Pius XII claimed that "scientists are beginning to find the finger of God in the creation of the universe," attempting to link Lemaître's theory to that theological concept, Lemaître himself attempted to keep the pope from making this association. That, however, was his way of saving his theory from the likes of Eddington and Richard Tolman, both of whom continued to contest the merging of science with religious views. Besides which, Pope Benedict XVI continued to parrot what Lemaître could not stop Pius XII from repeating. On the Catholic feast of the Epiphany in 2011, Benedict went public in claiming that "God's mind was behind complex scientific theories such as the Big Bang, and Christians should reject the idea that the universe came into being by accident." 12

In the end, Lemaître's theory was refined and further expounded by Robert Herman, Ralph Alpher, and George Gamow, the latter of whom ended up receiving the main credit for it, even above and over Lemaître himself. The theory's designation, however, owes itself to Fred Hoyle who was also vehemently opposed to it and who referred to it as "this 'big bang' idea" on a BBC radio program.¹³ It is quite obvious he intended it in derision, even though he later denied that is the way he meant it. In any case, as everyone knows, the name has stuck.

¹ *Ibid.*, p. 42.

² Ibid.

³ *Ibid.*, p. 43.

⁴ *Ibid*.. p. 42.

⁵ *Ibid.*, p. 43.

⁶ Ibid.

⁷ Ibid.

⁸ D. Kaiser, loc. cit.

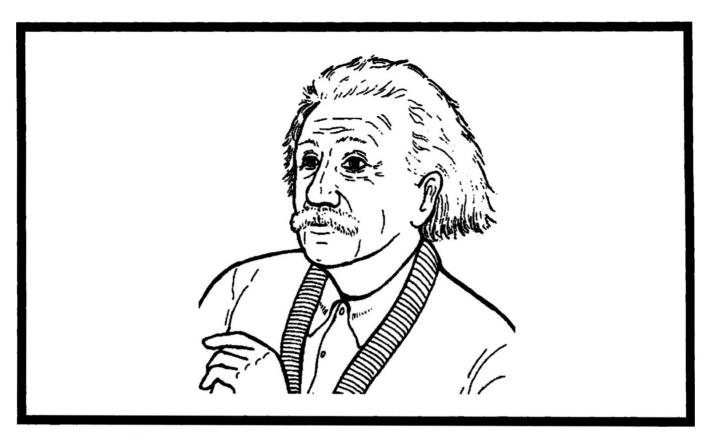
⁹ R. N. Ostling, *loc. cit*.

¹⁰ Y. Nazé, loc. cit.

¹¹ D. Kaiser, op. cit., pp. 518-520.

¹² P. Pullella, "God Was Behind Big Bang, Universe No Accident: Pope," Reuters (January 6, 2011).

¹³ Y. Nazé, loc. cit.



Albert Einstein—who had a change of mind concerning the Big Bang theory.

(Illustration by Bruce LaFontaine.)

SCIENCE AND RELIGION

The convergence of the Big Bang with the Biblical account of Creation continues to be stressed by some of the best scientific minds of the present century. Take, for instance, the famed genome researcher Francis Collins. In a debate between him and the atheistic Richard Dawkins that was hosted by *TIME* magazine in 2006, Collins was astute enough to state that *Genesis* was not intended to be a science textbook while, at the same time, he emphatically declared that "what the Bible describes is very consistent with the Big Bang."

Religion is not exactly what it used to be and, while it might not be widely known among practitioners, this is especially so of Catholicism. It might surprise quite a few to know that many of the "greatest minds of science" meet regularly in the Vatican "to council the pope on the hot topics of the day."²

Together with various other collections, the Vatican houses a "meticulously categorized" assortment of meteorites, with "samples from all over the world," that has become quite famous.³ Among its institutions, it maintains an observatory on its premises while additionally hosting a separate association, the Vatican Observatory Research Group, at the University of

¹ D. van Biema, "God vs Science," TIME (November 13, 2006), p. 38.

² M. Mason, "Holy Alliance," *Discover* (September 2008), p. 41.

³ *Ibid.*, p. 47.

Arizona's Steward Observatory. More importantly, it acts as the centre for the Pontifical Academy of Sciences, which is claimed to be "surprisingly nonreligious" and "one of the Vatican's least understood" of all its organizations.¹

"Though it is virtually unknown among laypeople, the Pontifical Academy of Sciences is an independent and remarkably influential body within the Holy See. Over the years its membership roster has read like a who's who of 20th-century scientists (including Max Planck, Niels Bohr, and Erwin Schrödinger, to name a few) and it currently boasts more than 80 international academicians, many of them Nobel laureates and not all of them Catholic—including the playfully irreligious physicist Stephen Hawking."

Caught between science and religion, Catholic academicians have been trying their utmost to reconcile the two. As the planetary physicist, Guy Consolmagno, who is also a Jesuit priest, could eventually proclaim:

"A hundred years ago we didn't understand the Big Bang. Now that we have the understanding of a universe that is big and expanding and changing, we can ask philosophical questions we would not have known to ask..."

That is how far the Catholic Church and its Papacy has come since its condemnation of Galileo Galilei in 1633 for having, among other things, proclaimed that it was Earth that moved around the Sun rather than the other way around.

Despite all that, however, religion continues to grip scientists in its exorbitant embrace. Take, as another example, the well-known, deeply honored, multi-degreed, professional engineer, Pal Asija. In prefacing his scientific views, he found it necessary to declare that his "world view assumes there is but one reality in but one universe created by one omni-all-good personal loving God."

Eventually, the miniscule point of Lemaître's "primeval atom" was replaced by what is termed "a space-time singularity" — an almost metaphysical entity—that is supposed to have erupted into everything. But even then, there are still those, like the Ukrainian physicist Alexander Vilenkin, who have no use for a formerly existing something, whether a primeval atom or singularity, and continue to believe that "the universe sprang out of nothing." Yes, as it has been said, that is an idea that "many astrophysicists find bizarre." Vilenkin, however, remains steadfast. "Creation of something from nothing is unusual," he unintentionally understates, "but it's just a matter of getting used to the idea."

¹ *Ibid.*, p. 43.

² Ibid.

³ Ibid.

⁴ P. Asija, "A Systems View of the Universe as One Reality," *Proceedings of the Natural Philosophy Alliance*, Vol. 8 (July 2011), p. 28, but see also pp. 30, 33 (emphasis added).

⁵ See, for instance, B. Dorminey, "What Triggered the Big Bang?" Astronomy (October 2011), p. 25.

⁶ *Ibid.*, p. 26.

⁷ Ibid.

⁸ Ibid.



Stephen Hawking—who, despite his irreligiousness, is still a member of the Vatican's Pontifical Academy of sciences.

(Illustration by Bruce LaFontaine.)

Although some may find it difficult to accept, this concept was even acknowledged by Albert Einstein, whose views on science and religion were not really all that different from the above. Although it's been reported by some that he did not believe in God, others have been just as confident that he did. Judging by the ambiguous manner in which he often expressed himself, it becomes somewhat difficult to say with certainty what he believed in. It can, however, be safely stated that his impression of the way in which the Universe came into being did reflect the erroneous Christian view of Genesis. The cosmos he believed in, as Samuel Warren Carey noted, actually "begins" with the "divine creation of matter" even though he knew quite well that "such creation is contrary to the conservation laws at the very foundation of physics." In view of such modern scientific views, Carey was right on the mark when he claimed that "rightly or wrongly, we [now] do as did our most primitive ancestors—invoke the supernatural when we reach the limit of our own observation and deduction."

¹ See here, for instance, A. Einstein, *Ideas and Opinions* (N. Y., 1954/1994), pp. 39 ff.

² R. Oldani, "Exercises in Natural Philosophy," *Proceedings of the Natural Philosophy Alliance*, Vol. 8 (Mount Airy, Maryland, 2011), p. 425.

³ S. W. Carey, *Theories of the Earth and Universe* (Stanford, California, 1989/1998), p. 331.

⁴ A slight idea of the above can be derived from N. de Grasse Tyson, "Holy Wars: An Astrophysicist Ponders the God Question," *Skeptical Inquirer* (September/October 2001), p. 27.

⁵ S. W. Carey, op. cit., p. 12.

⁶ Ibid.

The Ruin of Earlier Worlds

ORDER OUT OF CHAOS

theory are based on a series of misinterpretations. The first of these concerns the mistaken belief that God created whatever he did create out of nothing. As Nicholas Sykes thought it necessary to point out, most of us are "familiar with the time-honored view" that the Genesis account "describes 'Creatio ex Nihilo'—God's creation of the Universe out of nothing." As we shall soon see, however, creation out of nothing is not even implied in Genesis. In fact, this applies to most other mytho-historical accounts of that same event despite Sykes' claim that Genesis contains "an intentional element" that "marks it off from the others."

Aside from the few exceptions we noted in the previous chapter—and even these might have been due to misunderstandings and/or mistranslations by those who received the original accounts—ancient man more than hinted at a pre-existing something. In effect, Creation was seen as having evolved from the wreckage of a preceding existence. A Vedic hymn from India states that "this All," which is often misconstrued to mean "the Universe," was "indiscriminated chaos." As it is there maintained: "All that existed then was void and formless." Void and formless it might have been—at least in the eyes of ancient man—but it still existed. Thus, the Laws of Manu rightly inform us that, despite being "without form," the world—or what was later miscomprehended as the world—was believed to have already been in place.

Had one to come up with a civilization whose long-established culture is entirely different from that of India, one could hardly promote a better candidate than Siberia. No traditional contact could possibly have occurred between the occupants of this land and the Vedicoriented adherents of Hinduism. And yet we still encounter the same belief in a Creation that unfolded out of something rather than ex nihilo. Thus, in this country's freezing spaces we come across the belief that Creation unfolded as a competition between Num, the demiurge, and Nga, his alter-ego. The sky, however, was already in existence and so was the primordial ocean.⁶

¹ N. J. G. Sykes, "The Paradigm of the Electric Universe," *Proceedings of the Natural Philosophy Alliance*, Vol. 8 (Mount Airy, Maryland, 2011), p. 610.

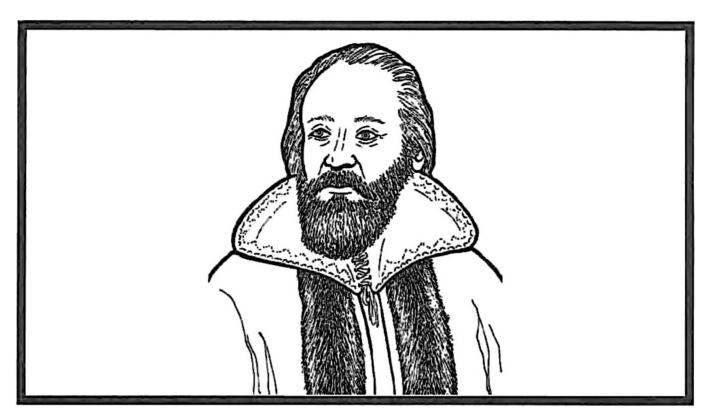
² Ibid.

³ Rig Veda, X: cxxix: 3.

⁴ Ibid., X: cxxix: 4.

⁵ P. Masson-Oursel & L. Morin, "Indian Mythology," New Larousse Encyclopedia of Mythology (London, 1972), p. 344.

⁶ E. Lot-Falck, "Siberia: The Three Worlds," *Larousse World Mythology* (London, 1972), p. 433.



Galileo Galilei—who was condemned by the Catholic Church for his public endorsement of the heliocentric view of the Solar System.

(Illustration by Bruce LaFontaine.)

But let's move south into a warmer country. The Incan god known as Viracocha was burdened with regional variations of the manner in which he had set about Creation. And yet in all these variations he always comes out as "a god-creator" who intervened in a world that was already in existence, even if still un-organized. Viracocha's role, as Jean-Claude Valla aptly expressed it, was "to transform chaos into cosmos." And since the Greek word cosmos rightly translates as "order," "harmony," or "an orderly arrangement," it can be said that Creation consisted in the formation of order out of chaos. As Veronica Ions well attested, all of these creations "appear to be mere arrangements of existing matter" rather than creations out of nothing.²

THE MAYIM

As with various others of his kind, there is no agreement between our work and Hans Bellamy's reconstruction of Earth's primeval cosmogonic history. When it comes to the mytho-historical record, however, he was not exaggerating in his discussion of Creation when he claimed that almost everywhere we look, "we find the ordering of a chaotic muddle of pre-existing things, a formation or a re-formation on an improved plan, a re-creation rather than a creation in the primary sense of the word."

¹ J-C. Valla, The Civilization of the Incas (Geneva, 1978), p. 66.

² V. lons, *Indian Mythology* (London, 1967), p. 28.

³ H. S. Bellamy, Moons, Myths and Man (London, 1949), 0, 145.

One of these "pre-existing things" was the very mayim, usually translated as "waters," over which the so-called spirit of Elohim was said to have moved prior to Creation. There will be those who will argue that these waters came after the creation of whatever was supposedly created because the mayim are mentioned after the proclamation of Elohim's Creation, which forms the very first words of Genesis. As with many others of a similar nature, however, this particular objection is usually raised by those of a religious disposition. Scholars of historical linguistics, however, rightly see the proclamation in question as a general statement, a sort of introduction, preceding the actual act of Creation that follows the first mention of the mayim.\(^1\)
The validity of this inference is evidenced by the fact that nowhere in Genesis is Elohim said to have ever created the mayim.\(^2\)
Nor is this concept to be found only in Genesis.

Although it has been told that the story of Creation as found in *Genesis* was borrowed, and adapted, from the one told by the Babylonians,³ it really isn't so since we find the same idea proclaimed in other areas that had no traditional relationship with either ancient Israel or any of the even older Mesopotamian civilizations. The Babylonian version of Creation, known as the *Enuma Elish*—"When on High"—is given in a series of seven cuneiform tablets, some of which came from the library of Ashurbanipal in Nineveh, others from Ashur. The Nineveh tablets have been dated to the 7th century B. C. Those from Ashur are said to be earlier, dating back to the twelfth-eleventh centuries of the same era.⁴ The texts they both contain, however, have been determined to be based on an even much earlier original.⁵

Back in those dim old days, the *Enuma Elish* was recited during the ritual of the Babylonian New Year festival on the fourth of the eleven days of the celebration. As in *Genesis*, the "waters" are given the honor of having been the primordial element and, also as in *Genesis*, they are there proclaimed to have existed before anything:

"When on high the heaven had not been named,
"Firm ground below had not been called by name,
"There was naught but primordial Apsu, their begetter,
"And mother Tiamat, who bore them all,
"Their waters comingling in a single body"

In Sumerian mythology, water is not only said to have preceded Creation, it was held to have been responsible for it. Thus, in a tablet that contains a list of deities, we encounter the goddess Nammu whose name is written with the ideogram for "sea." And it is this Nammu, that is this "sea," that was described as "the mother who gave birth to heaven and earth." As elsewhere, the origin of this primeval "sea" is not accounted for.⁷

¹ S. H. Hooke, *Middle Eastern Mythology* (Harmondsworth, 1963), p. 109.

² N. M. Sarna, Understanding Genesis (N. Y., 1976), p. 13.

³ Ibid., pp. 119-120; J. Gray, Near Eastern Mythology (London, 1969), p. 117.

⁴ W. F. Albright, Yahweh and the Gods of Canaan (N. Y., 1968), p. 8.

⁵ Ibid., p. 26; F. Guirand, "Assyro-Babylonian Mythology," New Larousse Encyclopedia of Mythology (London, 1972), p. 49.

⁶ Enuma Elish, Tablet 1, as cited by J. Gray, op. cit., p. 29.

⁷ S. H. Hooke, op. cit., p. 24.

The Egyptian myth of Creation, as contained in the last section of the papyrus known as *The Book of the Overthrow of Apophis*, also ascertains that water and chaos were the pre-existing elements from which Creation was said to have developed.¹

Let it not be thought that we are making too much of this. Having conducted a survey of myths dealing with Creation from around the world, Fred Gladstone Bratton could easily recognize that one of the most noticeable of motifs "in practically all of these" is the idea that "the universe" unfolded out of "chaos" from "primeval water."

We must, however, travel away from the precincts of the Biblical world if we wish to illustrate the universality of this theme. In India we encounter one version out of many in which Narayana lay for long ages floating on the primeval waters we have been discussing before proceeding to create what has unfortunately been misconstrued as "the Universe." Later myths ascribe Creation to Brahma who was said to have hatched from the cosmic egg as it also lay floating on the same primeval waters. So, similarly, outside Brahmanic India, among the tribes of the Madhya Pradesh, especially among the Birhors, we come across the belief that, "in the beginning nothing existed but the waters."

Among the Eskimos of Alaska—or Inuit, as they are now called—we also find a Creation myth that presupposes the pre-existence of a watery abyss from which all existence came into being.⁶

Farther south, but still in North America, creation out of water continued to be told by most Amerind nations.

"Among native peoples throughout North America and much of Eurasia, writes [Robert] Hall...storytellers long told a remarkably similar tale of the beginning of the earth. While the details varied somewhat, the essentials remained pretty much the same. In the beginning, they told their audiences, all was water."

The Hopi have for long insisted that Sotuknang, Taiowa's alter-ego, "gathered" something "from endless space" that later manifested "as the waters." So, also, was the sea—but one that "floated through space"—said to have already been in existence when the Huron deity known as the Spirit of All commenced on his Creation. Likewise among the Iroquois where the same Spirit of All was already in possession of "the gentle swooshing waves" from which to create whatever needed to be created. And according to the Yuma:

¹ F. G. Bratton, Myths and Legends of the Ancient Near East (N. Y., 1970), pp. 63-64.

² *Ibid.*, p. 13.

³ V. Ions, loc. cit.

⁴ Ibid.

⁵ O. Hedrrenschmidt, "Tribal Mythologies of Central India," in "India: The eternal Cycle," *Larousse World Mythology* (London, 1972), p. 264.

⁶ E. Lot-Falck, "Eskimo Lands: Man Against Nature," Larousse World Mythology (London, 1972), p. 441.

⁷ H. Pringle, In Search of Ancient North America (N. Y., 1996), p. 107.

⁸ F. Waters, *Book of the Hopi* (N. Y., 1974), p. 3.

⁹ H. Hirnschall, *The Song of Creation* (Vancouver, British Columbia, 1979), Myth 2. ¹⁰ *Ibid.*, Myth 3.

"This is how it all began. There was only water...Then out of the waters rose a mist...But deep down in the waters lived Kokomaht, the Creator."

It is the same in Central America where we come across a Nahua Creation myth in which the primordial substance also seems to have been water.² Although the Mayan *Popul Vuh* describes Creation in a rather convoluted manner, it still describes the original state of "the heavens" as a "void," with what has been translated as "the tranquil sea" already in existence.³ Thus the Creator was described as having been "in the heart of the still, dark sky and in the heart of the still, dark sea," or "in the depths of the water" in which he "seemed to shimmer." And in a Guatemalan Quiche myth, we read the following: "In the beginning everything was under water," above which hovered the gods.⁵

Following the Maya, the Aztecs were no different in this respect. According to them: "The world...was a huge flat space, surrounded by the sea, and at a certain point, the sea curved up to become the sky; the upper air consisted of 'sky waters'..."

As we have often done, we cross the Pacific to the archipelagos of Micronesia where we find that a pre-existing rock was believed to have been the matrix of Creation. But even this "rock of ages" was "associated with an endless stretch of original sea" from which the first gods were said to have emerged. So, also, do we find beliefs of this primeval sea, from which Creation came about, among the natives of Borneo.

There may be those who might argue that, to the natives of Oceania, surrounded as they are by the vast stretches of the Pacific, the unfolding of Creation from a primordial sea would be the most logical genesis. But, as we hope to have validly demonstrated, such an origin is believed in by various societies just about all over the world regardless of the environment of their geographical locality. Even among the Aranda of Australia, living in one of the world's most arid regions, far from lake or sea, we find the belief that Earth emerged slowly from an endless ocean. But our journey is not yet over. We cross the Indian Ocean, travel around the Cape of Good Hope and up the west coast of Africa. We land among the Yoruba of what was once Nigeria and discover that they, too, believe that, in the beginning, the world was all a watery marsh. 10

We encounter the same situation among the Classical Greeks. While some of them, like Anaximenes and Heraclitus, chose air and/or fire as the origin of all matter, Thales believed water to have been "the first principle of the cosmos." 11

¹ R. Erdoes & A. Ortiz, American Indian Myths and Legends (N. Y., 1984), p. 77.

² I. Nicholson, Mexican and Central American Mythology (London, 1967), p. 26.

³ M. Oldfield Howie, The Encircled Serpent (N. Y., 1955), p. 300.

⁴ D. A. Leeming, The World of Myth (N. Y., 1990), p. 60.

⁵ M. Fauconnet, "Mythology of the Two Americas," New Larousse Encyclopedia of Mythology (London, 1972), p. 439.

⁶ T. Lowenstein, "Raising the Sky," Gods of Sun & Sacrifice (London/Amsterdam, 1997), p. 58.

⁷ A. M. Panoff, "Oceania: Society and Tradition," Larousse World Mythology (London, 1972), p. 507.

⁸ G. H. Luquet, "Oceanic Mythology," New Larousse Encyclopedia of Mythology (London, 1972), pp. 457, 466.

⁹ A. M. Panoff, op. cit., p. 511.

¹⁰ G. Parrinder, African Mythology (London, 1967), p. 20.

¹¹ E. G. Suhr, The Spinning Aphrodite (N.Y., 1969), p. 44.

THE EGYPTIAN NU

Even if we were to grant that belief in a beginning was somehow considered indispensible, why did ancient man resort to the idea of a physical "world" having been created out of a watery chaos? Why water? Why chaotic water? And why was it not thought necessary that this water should also have been created?

In Egypt, not only was Creation believed to have unfolded out of the primeval water, the Creator, known as Atum, was himself believed to have risen *from* the water, which water was sanctified under the name Nu or Num.

Atum, however, was the same as Re or Ra.³ As the god was made to state:

"I am the god Tmu [i.e., Temu or Atum] in my rising; I am the only one. I came into existence in Nu. I am Ra who rose in the beginning."

That Ra, whom most mythologists have unfortunately misidentified as the Sun, was regarded as the Creator apart and above his identity as Atum is indicated by the fact that, "at one period of Egyptian history," as Wallis Budge tells us, "it seems to have been thought that the word ra indicated 'operative and creative power'." And as a proper name, Budge goes on, Ra "represented in meaning something like 'Creator'," which epithet was used "much in the same way and with the same idea as we use the term when applied to God Almighty, the Creator of heaven and earth and of all things therein."

In the Per(t) Em Hru, otherwise known as The Book of the Dead (but also the Papyrus of Ani), it is distinctly stated that "Ra cometh forth from Nu in triumph." The god is praised with the words: "Thou art born from the water, thou art sprung from Nu." Over and again was he acclaimed with similar words. "Alone and by thyself thou dost manifest thyself (when) thou comest into being above Nu." And over and again was he made to extoll himself by analogous repetitious incantations. "I am Ra who come[est] forth from Nu."

In digging deeper, however, we find out that, as far as the Egyptians were concerned, it was actually the Creator himself who was the very "waters" out of which Creation was said to have unfolded. This can be verified through the following intricate passages, so bear with me.

As Budge continues to inform us, the rising of Ra from the primeval waters was accompanied by the shedding of light from that very source.¹¹ In fact, as with other ancient

¹ *Ibid.*, p. 62.

² Ibid.

³ Ihid.

⁴ E. A. W. Budge, The Egyptian Book of the Dead (N.Y., 1895/1967), p. 281.

⁵ Idem, The Gods of the Egyptians, Vol. I (N. Y., 1904/1969), p. 322.

⁶ Ihid

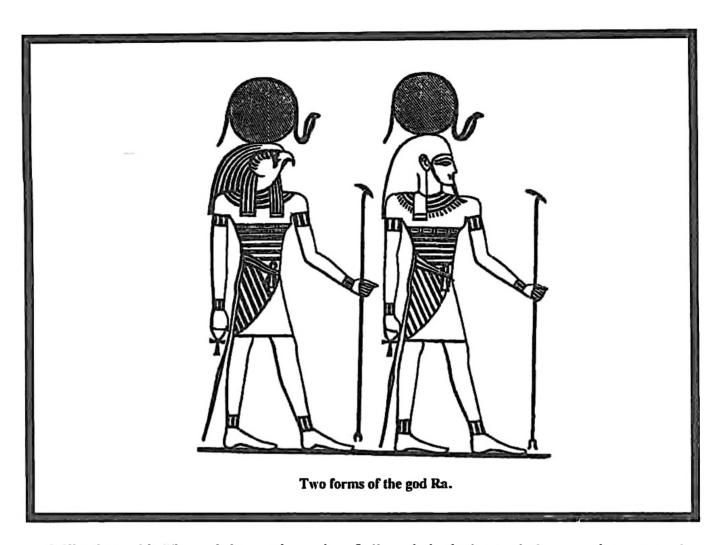
⁷ Idem, The Egyptian Book of the Dead (N.Y., 1895/1967), p. 251.

⁸ *Ibid.*, p. 252.

⁹ *Ibid.*, p. 325.

¹⁰ *Ibid.*, p. 338.

¹¹ Idem, The Egyptian Book of the Dead (N.Y., 1895/1967), p. xcix.



civilizations, this "formed the starting point of all mythological speculations, conjectures, and theories of the Egyptian priests."

This first burst of light is congruent with the light that was said to have been shed by Elohim in the very first lines of the Book of *Genesis*.² Throughout the years, it remained emphasized in Rabbinic belief that "creation was made possible by the advance of the primordial light into the darkness of chaos."³

In Egypt, however, so was the god Osiris acclaimed as the shedder of the primordial light. That Osiris, very much like Ra, was celebrated as the Creator is quite evident from what is said about him in the *Papyrus of Nesi-Amsu*:

"I developed myself from the primeval matter which I made, I developed myself out of the primeval matter. My name is Osiris, the germ of primeval matter." 5

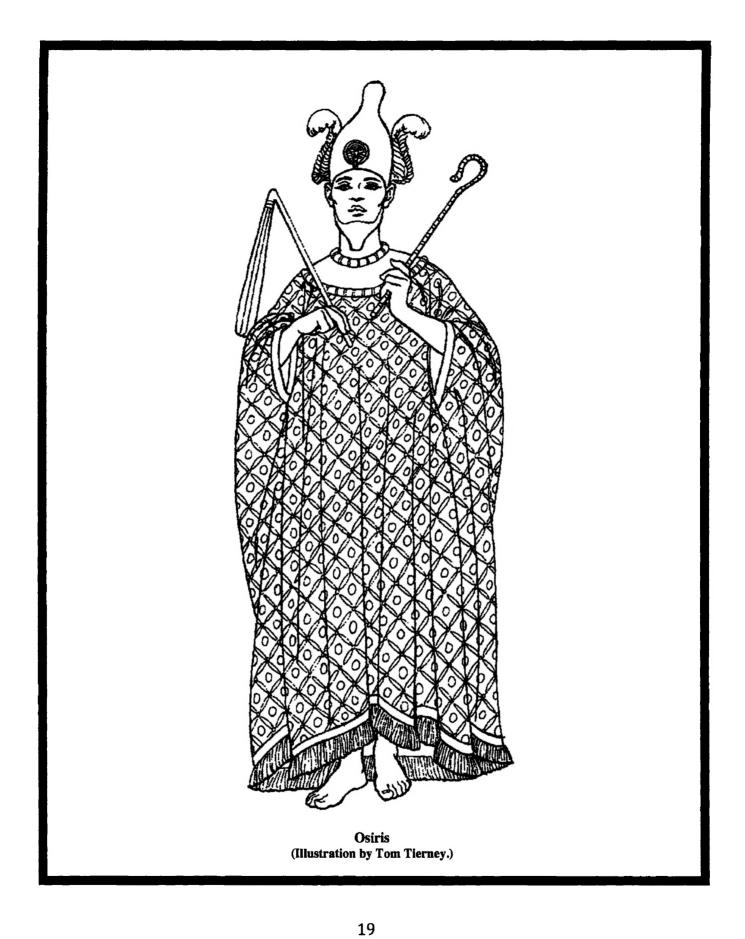
¹ Ibid.

² Genesis, 1: 3.

³ L. Ginzberg, *The Legends of the Jews*, Vol. V (Philadelphia, 1968), p. 112.

⁴ A. O. Bolshakov, Man and His Double in Egyptian Ideology of the Old Kingdom (Germany, 1997), p. 184.

⁵ R. Van Over, Sun Songs: Creation Myths from Around the World (N. Y., 1980), p. 255.



And yet, the very same papyrus identifies Osiris as the very Nu from which the god was said to have sprung. "I am the great god Nu," he is there made to proclaim, "who gave birth unto himself." A spell from the *Pyramid Texts* also lauds Osiris as being synonymous with the "Sea" and/or the "Ocean." He was in fact supplied with both those epithets.²

THE CELESTIAL WATERS

That this watery chaos or primordial ocean was celestial in origin is evidenced by it being referred to as "the watery abyss of the sky." But then, in the *Book of the Dead*, Ra is made to utter: "I am the Great God who created himself." It is then asked: "Who is he?" And the answer is given: "The Great God who created himself in the water..." For that reason, Ra was additionally known as Akeb-ur, the "god of the great celestial waters."

So, similarly, in Hindu mythology according to which the god Varuna is not only said to have appeared "in the sea's gathered waters," and to have been crowned by Brahma as "the lord of the waters," but to have been himself the waters. As it was said of him: "He is an ocean far-removed." Moreover, as to be expected when such "waters" are equated with a god, this particular "Sea" or "Ocean" was located in the sky, which is why it was additionally stated of Varuna that "through the heaven to him ascends the worship which these realms possess."

The celestial locality of this "sea" or "ocean" has confused some of the best mythologists, including the great Robert Thomas Rundle Clark. As far as he was concerned, there is "a gap in our knowledge" of Egyptian Creation myths. And this gap, according to him, stems from what he believes to be a lack of texts from Egypt's Old Kingdom. Had such texts existed, he then surmised, they would have revealed how God could have risen "out of the waters" to move into "the heights of the sky" where he supposedly now lives. And yet, this comes but a few sentences below his own realization that the Creator had floated "across the sky-ocean" while "looking down" upon his very creation. 12

The celestial locality of this "Sea" or "Ocean" is well indicated in one of the psalms contained in the Old Testament in which Yahweh asked to be praised by the "waters that are above the heavens."¹³

As we have already seen, we come across similar myths even in Africa. Granted that the Yoruba claim that this watery marsh was situated *under* the sky, we, however, notice that

¹ Ibid.

² R. O. Faulkner, The Ancient Egyptian Pyramid Texts (Stillwell, Kansas, 2007), p. 120.

³ E. A. W. Budge, op. cit., p. 251.

⁴ A. Piankoff, The Shrines of Tut-Ankh-Amon (N. Y., 1955), p. 121 (emphasis added).

⁵ E. A. W. Budge, Osiris and the Egyptian Resurrection, Vol. 1 (N.Y., 1911/1973), p. 131.

⁶ Rig Veda, I: clxi: 14.

⁷ Linga Purana, LVIII: 3.

⁸ Rig Veda, VIII: xli: 8.

⁹ Thid

¹⁰ R. T. Rundle Clark, Myth and Symbol in Ancient Egypt (London, 1978), p. 59.

¹¹ Ibid.

¹² *Ibid*. (Emphasis added).

¹³ Psalms 148: 4 (emphasis added).

what has been translated as "land" had not yet been created. At best, the watery marsh in question must perforce be understood as having been suspended somewhere in space. As in the examples cited above, this is additionally indicated through the very identification of the Creator with the waters of our discussion. Thus, what we term as "God" is in Africa referred to by various names, none of which are in any way abstractions. Among these we find him lauded as the very "Great Ocean Whose Headdress is the Horizon."

VIOLENT RE-CREATIONS

Had these worldwide myths of Creation been conceived in order to account for the origin of the world, philosophical demand should have been satisfied with *one* Creation. Why, then, do we find that this is hardly the case? Why do we find it recorded that God himself found fault with his own creation and, for one reason or another, ended up destroying it in favor of a better model? What is even worse is that this transpired not just once, but many times, and each time it did so violently.

That creation consisted of a violent act is found embedded in the very Book of Genesis. There, in its very first verse, it is stated that: "In the beginning Elohim created the heaven and the Earth." What is not generally known is that the Hebrew word translated as "created," that is bara, which comes from an obsolete primitive root, has the etymological meaning of "forcing into shape," and contains a connotation of violence. For that reason the word is also used in the sense "to cut down," as of a tree, and "to dispatch." What this amounts to is that Elohim forced "the heaven and the earth" into shape violently. Not only did Creation not unfold out of nothing, neither did it do so peacefully.

Genesis tells of only one Creation, but there are other Jewish sources that tell of a recurring series of Creations and destructions. According to one of these sources, God "made several worlds before ours, but He destroyed them all, because He was pleased with none until He created ours." Louis Ginzberg explained this passage by calling it "a faint reflection of the view that God formed the world out of eternal chaos, since the legend could not question the doctrine of creatio ex nihilo." As he then adds, the legend probably arose in order to account for an "originally presupposed" belief in "a pre-Existent chaos."

Philo Judaeus, the Jewish Biblical philosopher from Hellenistic Alexandria, was not entirely wrong in his attempted explanation of these events. As he had it stated, this series of re-creations "is due to the forces of ever-active fire which exists in things." And, "in the

¹ G. Parrinder, op. cit., p. 20.

² *Ibid.*, pp. 19-20.

³ *Ibid.*, p. 20.

⁴ Genesis I: 1.

⁵ H. S. Bellamy, op. cit., p. 148.

⁶ J. Strong, Hebrew and Chaldee Dictionary (Madison, New Jersey, 1890), p. 23; see also L. Graham, Deceptions and Myths of the Bible (N.Y., 1979), p. 29.

⁷ L. Ginzberg, op. cit., Vol. I, p. 4.

⁸ *Ibid.*, Vol. V, p. 3.

⁹ Ibid.

¹⁰ Philo Judaeus, On the Eternity of the World, as quoted by I. Velikovsky, Worlds in Collision (N. Y., 1952), p. 30.

course of long cycles of time," he went on, this ever-active fire "resolves everything into itself and out of it is constructed a reborn world."

In likewise manner, Hindu philosophy does not consider Creation to have been a "permanent feature" since it finally ended in dissolution. And since the Hindus believe in more than one creation, so do they believe in several dissolutions each of which is followed by a re-creation.²

There are also various tribes in central India that hold themselves aloof from the Brahmanic system of their neighbors. Yet even so, as among the so-called Bison-Horn Marias, the Gonds, and the Saora of Orissa, we still come across the belief that one world had already been created when it was destroyed by floods.³

Among those races that did not preserve their ancestral memories in writing, but, rather, in oral traditions, the myths, if sometimes of a less philosophical bent, often remained somewhat purer. Prime examples among such races are the original natives of North America. That there had been a previous world before this one was held by the Wintus of the upper Sacramento Valley, California,⁴ a view that was also common among the Sioux.⁵ So, similarly, among the Paiute. "There are many worlds," these natives have been known to claim. "Some have passed and some are still to come."

When it comes to the cosmogonic myths of the Battak tribes of Sumatra, Creation and destruction were just about synonymous. As noted by G. H. Luquet:

"Under various forms, all more or less determined, the [Battak] idea is that the creation of the world was a disadvantage for a being already in existence, who reacted with a violent agitation which destroyed the earth. The creator took the necessary steps to prevent another destruction, but the agitation continues, and this is the cause of earthquakes."

In Papua, New Guinea, the primitive Korowai believe in what has been termed "a powerful spirit" named Ginol. It was he who, according to them, created the world, "but only after having destroyed the previous four." And yet even this fifth world, still according to them, will someday be obliterated while yet another will take its place. Relying on what they had been told to have transpired in the past, they portray the future in similar terms. "The land will split apart, there will be fire and thunder," they predict. "This world will shatter, and a new one will take its place."

Crossing over to Hawaii, a comparable state of affairs is reported by Roland Dixon. "One of the most curious and interesting of Polynesian cosmogonic myths is that found in Hawaii,"

i Ibid.

² "Introduction" to The Linga Purana (as translated by a Board of Scholars, Delhi, 1973), p. xxi.

³ O. Herrenschmidt, "Tribal Mythologies of Central India," in "India: The eternal Cycle," *Larousse World Mythology* (London, 1972), pp. 264-265.

⁴ J. Curtin, Creation Myths of Primitive America (N. Y., 1984), p. 4.

⁵ R. Erdoes & A. Oritz, op. cit., p. 496.

⁶ R. Van Over, op. cit., p. 38.

⁷ G. H. Luquet, op. cit., p. 466.

⁸ P. Raffaele, "Sleeping With Cannibals," Smithsonian (September 2006), p. 58.

⁹ Ibid.

he tells us. "In the very beginning, however, a striking variation occurs, in that although we have the source of all things from chaos, it is a chaos which is simply the wreck and ruin of an earlier world."

Back on the mainland of Asia, we find that the ancient Chinese, too, believed in the recurrence of world destructions. These destructions are discussed in the Sing-Li-Ta-Tsiuen-Chou in which, somehow echoing the belief of Aristotle, the span between the catastrophes is referred to as a "great year." The end of such a "year" is there described as "a general convulsion of nature" during which "the sea is carried out of its bed, mountains spring out of the ground, rivers change their courses, human beings and everything are ruined, and the ancient traces effaced."²

RECURRING CATACLYSMS

Together with other reports of similar events we have already surveyed, the above Chinese view brings Creation down to Earth. It was such reports that drove Max Fauconnet to ask:

"Does this mean that humanity was once upon a time reduced to a little group of individuals who later spread over the earth, bringing with them their legends which they altered through the centuries in accordance with new climates and new habits? Or, as seems more probable, are all these legends a confused account of great events on a planetary scale which were beheld in terror simultaneously by the men scattered everywhere over the world?"

So, likewise, with Vine Deloria, Jr., who has stated that:

"What we have previously been pleased to call creation stories might not be such at all. They might be simply collective memories of a great and catastrophic event through which people came to understand themselves and the universe they inhabited. Creation stories may simply be the survivors' memories of reasonably large and destructive events."

And so, also, Fred Warshofsky:

"The same might be said of all the other cultures of the world that share the creation myth. For if they were survivors of some global disaster, they would, in fact, be in a position to witness a rebirth, a re-creation of the world after the Götterdammerung of catastrophe."⁵

¹ R. B. Dixon, Oceanic Mythology, Vol. 9 of The Mythology of All Races (N.Y., 1916), pp. 15-16 (emphasis added); see also G. H. Luquet, op. cit., p. 460; F. Fleming, "Polynesian Paradise," in C. Westhorp (Ed.), Journeys Through Dreamtime (Amsterdam, 1999), p. 100.

² G. Schlegel, Uranographie Chinoise (1875), p. 740.

³ M. Fauconnet, "Mythology of the Two Americas," New Larousse Encyclopedia of Mythology (London, 1972), p. 448 (emphasis added).

⁴ F. Warshofsky, Doomsday: The Science of Catastrophe (N.Y., 1977), p. 73.

⁵ *Ibid.*, p. 74



Vine Deloria, Jr, who saw ancient reports of Creation as collective memories of a great and catastrophic event

(Photograph—1996—by the author.)

What the above authorities proclaim is that it was the cataclysmic destruction of large parts of the world—through such causes as volcanism, oceanic intrusion, earthquakes, and so forth—that was later transformed into worldwide epics of Creation. But, for one thing among others, why would such destructions have been blamed on a chaotic stretch of water said to have been located in the sky?

It is not that we decry destructions. How can we when the reports are so persistently consistent. Those who are familiar with the prequels to this work surely know that? But there had to have been something beyond that. As far as we're concerned, no amount of succeeding stability could have led to the belief that Earth had been created or even re-created. After all, when all is said and done, it was cosmos, that is order, that was said to have evolved from chaos, and not the other way around. It thus remains quite obvious that, apart from these destructions, something must have been created.

PLASMAS AND AURORAS

Having mentioned Marinus van der Sluijs in our first chapter, we might as well register our disagreement with him concerning what he eventually started to call "plasma mythology." As he himself defined it, plasma mythology is "the study of plasmas, specifically near-earth

plasmas" as they pertain to "human traditions, such as mythology and proto-scientific records." When it comes to Creation, so he tells us, "numerous details can be explained on the theory of a different sky in the past." As far as van der Sluijs is concerned, however, this "different sky" owed its impetus to a stupendous plasmatic storm that was witnessed by ancient man in the long forgotten past and never again since then. To use his own words, "many myth lines, including the global themes of creation mythology, were ultimately based on eye-witness accounts of complex near-earth plasmas accompanying prehistoric geomagnetic storms of unimaginable magnitude."

These "near-earth plasmas" are based on what Anthony Peratt has surmised to be a "high-energy-density aurora that must have been observed towards the end of the Neolithic Period coming in from a south polar direction." Van der Sluijs then tells us that:

"Interdisciplinary collaboration...suggests that the formative history of this aurora encapsulates what traditional societies across the globe collectively remember as the 'events of creation.' It looks like these people interpreted the complex movements and arrangements of conspicuous plasma filaments in the sky as the organization of space by mythical gods and ancestors."

Near-identical ideas concerning severe auroral interactions that would have inaugurated these world-wide mythic themes had even earlier been espoused by Milton Zysman who held that Earth's auroras would have been more energetic during the Bronze Age, which claim he rested on the contention of Earth's diminishing magnetic field.⁶

Frank Wallace, who well knows of Zysman's work, is of a similar opinion. As he made it known during a lecture he gave in 2011, what the ancients would have seen projected against the sky during the events in question "could be purely a plasma phenomenon, caused by the shape of Earth's magnetic field as it funnels in toward the poles, and made visible at times of strong electrical activity by the Sun" —in other words a highly energetic auroral display.

Before all of these, however, back in the eighteenth century, as van der Sluijs himself reminds us, there lived the French biologist, geophysicist, and astronomer, Jean-Jacques d'Ortous de Mairan (1678-1771). Having been among the first to study the aurora borealis, he convinced himself that these polar lights may have actually illuminated "aspects of mythology." Not only would these lights have been envisioned by ancient man as godly apparitions, but also as the fiery weapons they were said to have wielded. 10

¹ M. A. (Rens) van der Sluijs, "Mountains of Evidence," thunderbolts.info (August 21, 2011).

² Idem, "Plasma Mythology — A Research Programme," Chronology & Catastrophism Review (2010), p. 3.

³ Idem, "The Voice of the Peoples," Thunderbolts.info, picture of the day (March 3, 2010, emphasis added).

⁴ Idem, "A Potted View of Ancient Geometric Imagery," in *ibid*. (September 23, 2008).

⁵ Ibid.

⁶ M. Zysman, "Saturn Myth—A Challenge to the Planetary Hypothesis," KATAKLYSMOS (May 19, 1987), p. 9; see also, idem, "Let There Be Lights," Catastrophism 2000 (Toronto, 1990), pp. 155-156, 158-159, 172, 178 ff.

⁷ J. Abery, "Report on the SIS Autumn Lecture Meeting of 3rd September, 2011," Chronology & Catastrophism Workshop (2011:2), p. 2.

⁸ M. A. (Rens) van der Sluijs, "Mountains of Evidence" (see above).

⁹ Ibid.

¹⁰ Ibid.

In the pages that follow, we, too, shall be dealing with plasmatic formations, but the "prehistoric geomagnetic storms" and "super auroral events" on which van der Sluijs, Peratt, Zysman, and Wallace, not to mention de Mairan, rely is not what we shall be presenting as the cause of Creation. Not only that, but, Peratt notwithstanding, the mytho-historical record leaves little doubt that Creation unraveled from Earth's north, rather than its south, celestial pole.

Chapter 3

In Retrospect

THE SATURNIAN CONNECTION

orget auroras. They had nothing to do with Creation. Even the Kaweskar Indians of southern Chile, primitive as they might have been, knew better. Long after their migration from their original northern homeland, they continued to remember the Creator as having been Kólas, which name translates as "star." And they were right on the mark. But let's backtrack a little.

One particular item, out of many, that has confused mythologists throughout the years is the identity of the Creator in most of the ancient world as the god of the planet Saturn.² "Indeed," as David Talbott tells us, "the consistency with which early astronomies identify Saturn as the former creator-king is extraordinary." Saturn was the very "seed," Talbott stresses, "from which the cosmos sprang."

At this point we must again beg our readers' indulgence in having to go over the bare bones of our thesis up to this point. We cannot, however, do so in great detail or we will only end up repeating what we have already documented in previous volumes of this series. Cutting straight across the lawn, as we often have to do, we need only point to one of the best-known creators in the western world, the one referred to in that great compilation of ancient tracts known as the Bible. The first book of that Judeo-Christian opus contains the line with which we started the present work. "In the beginning God created the heaven and the earth." The Hebrew word that has been translated as "God," however, is Elohim, which is the majestic plural of the Semitic deity known as El. The Greek transliteration of this name is Elos, the very god that Philo Byblius proclaimed to have been the same as Kronos, which was the Greek name for Saturn. George Rawlinson, somewhat cautiously, expressed it in these words:

"The identification of the Chaldean II [the same as El]...with Saturn, which Diodorus makes, and which may seem to derive some confirmation from Philo-Byblius, is cer-

¹ E. C. Krupp, Skywatchers, Shamans & Kings (N. Y., 1997), p. 33.

² D. N. Talbott, The Saturn Myth (N. Y., 1980), p. 329.

³ Idem, "Saturn: The Ancient Sun God," THOTH—electronic newsletter sponsored by KRONIA Communications—Vol. I, No. 10 (April 22, 1997), p. 2.

⁴ Idem, The Saturn Myth (see above), p. 32

⁵ Genesis I:1.

⁶ D. M. Rohl, A Test of Time: The Bible-From Myth to History (London, 1995), p. 228; D. Cardona, Metamorphic Star (Oregon, 2011), pp. 34-35.

⁷ L. Delaporte, "Phoenician Mythology," New Larousse Encyclopedia of Mythology (London, 1972), p. 83; see also W. A. Heidel, The Day of Yahweh (N. Y., 1929), p. 470.

⁸ J. O'Neill, *The Night of the Gods* (London, 1893), pp. 778-779.



Marinus Anthony van der Sluijs, who sees Creation as ancient man's remembrance of a complex nearearth plasma apparition.

(Photograph—2005—by the author.)

tainly correct, so far as the planet Saturn, which Diodorus especially mentions, is concerned..."

Philo Byblius, and other classical sources, as well as inscriptions in Greek and Latin, wrote Frank Moore Cross, all establish the identity of El as the Greek Kronos, the same as the Latin Saturnus.² Moreover, as Cross well pointed out, this equation has long been known, while new information continues to confirm the older data.³ William Albright was therefore right on track when he identified El as the Latin Saturnus without much ado.⁴

Leaving El and Elohim alone for the time being, we point next to the Zoroastrian myth in which Zurvan was said to have provided, or emitted, the "original unformed matter." This ancient deity was regarded as the "first principle," the "original seed," and "the father of the Cosmos." And yet, once again, as Bartel van der Waerden tells us, Zurvan, also known as Zruan, is referred to as Saturn in Armenian texts. To clinch the matter, the same Zurvan was also identified as Kronos, the Greek god and planet Saturn.

¹ *Ibid.*, p. 74.

² F. M. Cross, Canaanite Myth and Hebrew Epic: Essays in the History of the Religion of Israel (Cambridge, 1973), p. 25.

³ Ibid.

⁴ W. F. Albright, Yahweh and the Gods of Canaan (N. Y., 1968), p. 144.

⁵ D. N., op. cit., p. 34.

⁶ R. C. Zaehner, Zurvan: A Zoroastrian Dilemma (Oxford, 1955), p. 222.

⁷ B. L. van der Waerden, Science Awakening II: The Birth of Astronomy (Netherlands, 1974), p. 194.

⁸ J. de Menasce, "Persia: Cosmic Dualism." *Larousse World Mythology* (London, 1972), p. 203.



Anthony Peratt, who has surmised that a high-energy-density aurora must have been observed towering in the sky toward the end of the Neolithic Period.

(Photograph — 2005 — by the author.)

In ancient Chinese sources, chaos is equated with the being known as Huang-Ti, the Yellow Emperor of dim antiquity. In different versions of the myth, this Yellow Emperor was responsible for having "brought order to the elemental chaos at the beginning of creation." Huang-Ti, however, also originated as a cognomen of the Saturnian planetary god. That Huang-Ti was regarded as the Creator is also well known, and that is tantamount to proclaiming that Creation was the work of the Saturnian planetary deity.

So, similarly, with Japanese culture in which Post Wheeler well recognized this "primal myth" as "the Kronos legend in its thousand forms, the father of all mythologies, upon which so many peoples have constructed their cosmogonies."⁵

By the time of the Greeks and Romans, to say nothing of those who came later, the conception was so ingrained in the minds of scholars and those of a religious disposition that they could spell it out in no uncertain terms. Thus, in that "mysterious" work of theirs, popularly known as the *Great Magical Papyrus of Paris*, the Greeks actually addressed Kronos outright as the "founder of the whole world we live in." An extant Orphic fragment bearing on our subject was preserved by Proclus who well understood the connection between

¹ M. Soymié, "China: The struggle for Power," Larousse World Mythology (London, 1972), p. 274.

²T. Lin, Chinese Myths (London, 2001), p. 22.

³ G. de Santillana & H. von Dechend, *Hamlet's Mill: An Essay on Myth and the Frame of Time* (Boston, 1969), pp. 129, 135.

J. C. Ferguson, Chinese Mythology, Vol. VIII of The Mythology of All Races (N. Y., 1964), p. 21.

⁵ P. Wheeler, *The Sacred Scriptures of the Japanese* (N. Y., 1952), p. 389.

⁶ K. Preisendanz, Papyri Graecae Magicae: Die Griechischen Zauberpapyri, Vol. I (Berlin, 1928), p. 173.



Jean-Jacques d'Ortous de Mairan (1678-1771) who convinced himself that polar lights may have been envisioned by ancient man as godly apparitions.

Saturn and Creation. "Kronos," according to him, gives "from above the principles of intelligibility to the demiurge, and he presides over the whole creation."

Among the Romans, the god Janus was considered a "god of beginnings," and ascribed "an essential role" in Creation. This same Janus was also known as the chaos out of which Creation was said to have unfolded. And yet, as Alexander Hislop noted, Janus is easily identifiable as Saturn. 5

And so, likewise, down into modern times. Although Manly Hall was more concerned with mystical philosophy than he was with the verity of mytho-historical content, he was, as David Talbott noted, still cognizant of the fact that "the planet Saturn looms as the elementary power of creation."

Despite all that, the Creator was not merely planetary since the planet in question had formerly been a brown dwarf star in close proximity to Earth before it degenerated into the gaseous planet we now know as Saturn. The Kaweskar Indians *did* have it right.

What we need to find out now is what this proto-Saturnian star, or the god named after it, had to do with the creation of the so-called "world."

Before we go into that, however, it would be best to summarize the basis of our unfolding scenario up to this point.

THE PROTO-SATURNIAN SUN

It was in the early 1940s that Immanuel Velikovsky posited that the planet Saturn had once been much larger than at present. Although he turned out to be in error on many an issue, he was definitely vindicated on this particular one. That the planet Saturn is the relic of what had previously been a brown dwarf star is now an accepted tenet of mainstream astronomy. As Maria Zapatero-Osorio reported at the turn of the present century, in time, devolving brown dwarf stars "will look like Jupiter and Saturn." And, as other astronomers found reason to state around the same time, sub-brown dwarfs, or Planetary Mass Objects, "give us a golden opportunity to see what Jupiter and Saturn were like in their youths."

¹ O. Kern (Ed.), Orphicorum Fragmenta (Berlin, 1963), p. 194 (emphasis added).

² P. Grimal, "Rome: Gods by Conquest," *Larousse World Mythology* (London, 1972), p. 178.

³ F. Guirand & A.-V. Pierre, "Roman Mythology," New Larousse Encyclopedia of Mythology (London, 1972), p. 200.

⁴ Ovid, Fasti I:103, see also 119-120; F, Guirand & A.-V. Pierre, op. cit., pp. 200-202; E. G. Suhr, Before Olympos (N. Y., 1967), p. 107..

⁵ A. Hislop, *The Two Babylons* (London, 1916), p. 271.

⁶ M. P. Hall, An Encyclopedic Outline of Masonic, Hermetic, Qabalistic and Rosicrucian Symbolic Philosophy (San Francisco, 1928).

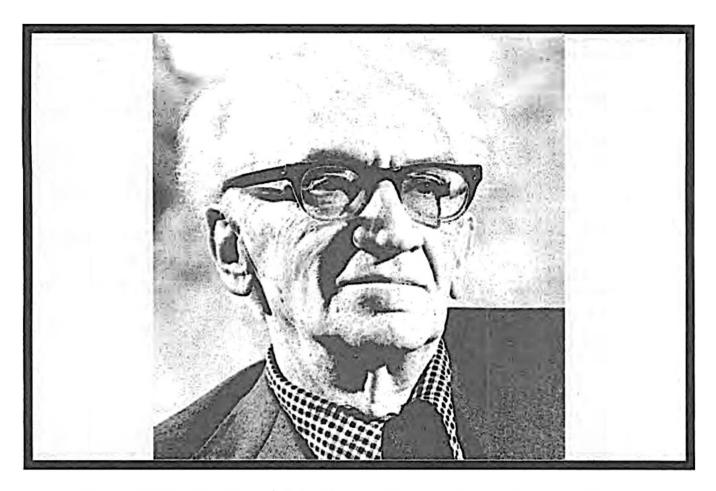
⁷ D. N. Talbott, op. cit., p. 135.

⁸ 1. Velikovsky, "On Saturn and the Flood," KRONOS V:1 (Fall 1979), p. 6.

⁹ A. P. Boss, *Science* (June 20, 1997).

¹⁰ M. Fox, "Rogue 'Gas Balls' in Space Break Rules of Solar System, Astronomers Find," *The Vancouver Sun* (October 6, 2000), p. A13.

¹¹ R. Naeye, "Lonely Planets?" Astronomy (June 2003), p. 41.



Immanuel Velikovsky who posited that the planet Saturn had been much bigger in the past. (Photograph by Donna Foster Roizen.)

It has recently been stated that brown dwarf stars are "the oddballs" or "the misfits" of the cosmos. And yet, it has also been claimed that there are more brown dwarfs than Sun-like stars in our neighborhood alone, as many as 30 billion of them. If that is the case, and it does seem as if it is, how odd could these brown dwarfs really be?

What the scholarly world also had to finally admit is that humanity has known, and has kept track, of the planet Saturn since prehistoric times.³ As far as we are concerned, this would not have been all that difficult since our hypothesis demands that Earth was actually a satellite of the proto-Saturnian dwarf star which loomed large in close proximity. It was, in

¹ "Missing Link Between Planets and Stars Found," Space.com (April 10, 2008); "The Coldest Brown Dwarf Ever Observed: Closing the Gap Between Stars and Planets," spacedaily.com (April 14, 2008); "Astronomers Find the Two Dimmest Stellar Bulbs," jpl.nasa.gov/news (December 10, 2008).

² A. Burrows, "Extrasolar Giant Planets and Brown Dwarfs," *Science* (August 6, 1999), pp. 847-848; S. Mohanty & R. Jayawardhana, "The Mystery of Brown Dwarf Origins," *Scientific American* (January 2006), p. 40; G. Basri, "A Decade of Brown Dwarfs," *Sky & Telescope* (May 2005), p. 38.

³ C. O. Choi, "Mounting Mysteries at Saturn Keep Scientists Guessing," Space.com (August 27, 2007).

effect, Earth's primordial sun in a system that had originally been floating freely outside the demarcation of the present Solar System.

That dwarf stars can be accompanied by planets had already become known at the turn of the present century. The first of these new planetary systems that came to light were found to be centered on red, rather than brown, dwarf stars. Before long, however, a planet was actually imaged in association with a brown dwarf. And that was only the beginning.

In due course, another planet came to light around the nearby brown dwarf star designated GQ Lupi.⁴ And, as if that was not enough, an entire planetary system was eventually detected forming around a brown dwarf that is barely larger than a giant planet.⁵ There is, therefore, nothing unusual about Earth having been a satellite of the proto-Saturnian brown dwarf star.

Brown dwarfs have actually "been spotted wandering through space fairly close to Earth." Very much like our posited proto-Saturnian sun, such brown dwarfs are actually floating freely outside the demarcation of the Solar System.

That the Sun had to have been dimmer in Earth's past is a theory that keeps surfacing through the years. But, throughout those very years, it has never been established how the early Earth could have been kept from freezing under such a dimmer Sun. 8

Back in 1972, Carl Sagan and George Mullen tried to solve the problem by having ammonia trap Earth's atmospheric heat in what eventually became known as a runaway greenhouse effect. However, as it was later indicated, ultraviolet light from the Sun would have destroyed the excess ammonia.⁹

A different type of greenhouse effect has been posited by a German team headed by Philip von Paris as having been due to high amounts of carbon dioxide in Earth's primordial atmosphere that supposedly stemmed from a period involving asteroidal impacts.¹⁰ This, however, is at odds with other theories, including the one behind the inception of the Younger Dryas, which claim that cosmic impacts are more likely to produce a cooling, rather than a warming, effect—neither of which is here held to be correct.

¹ ESO insert in M. R. Zapatero Osorio, "Planets Without Suns," Astronomy (October 2006), p. 46.

² I. Semeniuk, "Planet Quest," Sky News (September/October 2005), p. 12; M. Alpert, "Red Star Rising," Scientific American (November 2005), p. 36; see also, E. Baldwin, "Two Steps Closer to Finding Earth's Twin," Astronomy Now (June 2009), p. 66; T. Phillips, "Kepler Discovers a Tiny Solar System," Science@NASA Headline News (January 11, 2012).

³ D. Overbye, "Scientists Say Red Speck is Indeed Huge New Planet," *The New York* Times (April 30, 2005); D. Shiga, "Exoplanet Image Confirmed?" *Sky & Telescope* (April 2005), p. 22; F. Reddy, "Exoplanet Surprises" in "Top 10 Astronomy Stories of 2005," *Astronomy* (January 2006), p. 41; M. R. Zapatero Osorio, "Planets Without Suns," *Astronomy* (October 2006), p. 46.

⁴ R. Burnham, "First Exoplanet Imaged?" Astronomy (April 2005), p. 20.

⁵ New Scientist (February 12, 2005), p. 12.

⁶ V. Damgov, "Some Reflections on the Notion of Quantavolution," in I. Tresman (Ed.), Quantavolution: Challenges to Conventional Science (UK, 2010), p. 454.

⁷ See here, for instance, K. Michaelian & O. Manuel, "Origin and Evolution of Life Constraints on the Solar Model," *Journal of Modern Physics*, Vol. 2, No.6 (June 2011), p. 589.

⁸ M. Schirber, "Our Sun May Have Been Bigger Long Ago," in the online Astrobiology Magazine (February 14, 2012).

⁹ Ibid.

¹⁰ M. Schirber, loc. cit.; A. L. Gronstal, "Why Early Earth Did Not Freeze," Space.com (September 4, 2008).

The pendulum has more recently been made to swing in the opposite direction by a new theory that actually asks for a more massive Sun in the past, but not only would this turn the evolution of stars on its head, it was actually reached by an admitted tweaking of what we really know, or think we know, about the Sun. Not much support has been encountered for this particular concept.¹

The above conundrum is resolved by Earth's primordial sun having been a brown dwarf star that, because of its much smaller size, even at close quarters, would fill the bill of the fainter sun that continues to be looked for.

As Vladimir Damgov, among others, has indicated: "Brown dwarfs generate enough heat to shine, but only dimly and in infrared light."

They also radiate highly in the ultraviolet spectrum that, together with infrared, would have been needed for the inception and sustenance of life.³

Proto-Saturn would therefore have been hotter than the planet is at present. And, to be sure, it has not yet had enough time to eliminate all of its primordial heat. Even after the Cassini spacecraft had time to study the planet at close quarters, Saturn was still being claimed to be a "world that is hotter than it should be."

"Its average distance of 1.4 billion kilometers from the Sun means that Saturn doesn't get a lot of heat from the Sun. Yet puzzlingly, Saturn radiates a lot of heat, more than can be accounted for from what it receives."

Theories seeking to account for this extra Saturnian heat have not been in short demand.⁶ There have even been those who have sought the answer to this riddle through the concentration of uranium that undergoes nuclear fission in the cores of the giant planets.⁷ None of these attempted explanations have so far proven satisfactory. Those among the few scientists who recognize Saturn as having once been a brown dwarf star, however, do not need to go searching for the correct answer.

THE CIRCUMSTELLAR DISK

Judging by what our ancient ancestors remembered and passed on to their descendants, Earth's primordial sun was surrounded by a nebulous entity that we have conjectured to have been a circumstellar disk akin to those we now see surrounding stars. Needless to say, ancient man had no way of knowing what this nebulosity really was. Thus, the manner in which he described it was just as tenuous as the very item of his concern.

¹ M. Schirber, loc. cit.

² V. Damgov, loc. cit.

³ W. Thornhill, "Stars in an Electric Universe," AEON, V:5 (January 2000), p. 48.

⁴ D. Hawksett, "Discovering Saturn," Astronomy Now (July 2006), p. 60.

⁵ *Ibid.*, p. 61

⁶ Ibid.

⁷ "Oklo: An Unappreciated Cosmic Phenomenon," Science Frontiers (January/February 1999), p. 1.



Artistic rendition of a circumstellar disk. (Illustration courtesy of NASA.)

In ancient Hebraic nomenclature, this nebulosity ended up as the tohu wa bohu of the Book of Genesis, which phrase is traditionally translated as "without form and void" or "void and empty" in relation to whatever it was that Elohim was said to have created. Tohu wa bohu, however, can also mean "utter chaos," which conforms with the "chaos" that presided as the ruling principle before Creation in various ancient cosmogonies.²

The chaotic bohu of Jewish myth was also understood as an expanse of mud,³ which is also the manner in which the Phoenicians, who called it *mot*, or slime, understood it.⁴ To Zoroastrians, the entity in question was referred to simply as the "original unformed matter."

¹ Curtis Taub & David Lorton, private communiqué.

² Hesiod, Theogony 115-116; E. G. Suhr, *Before Olympos* (N. Y., 1967), p. 107; F. Guirand, "Greek Mythology," *New Larousse Encyclopedia of Mythology* (London, 1972), p. 87; F. Guirand & A.-V. Pierre, *op.* cit., pp. 200-202; L. Delaporte, *op.* cit., p. 82; H. Gregory, *The Metamorphosis* (N. Y., 1979), p. 15;

³ H. S. Bellamy, *Moons, Myths and Man* (London, 1949), p. 150.

⁴ L. Delaporte, loc. cit.

¹ D. N. Talbott, op. cit., p. 34.

Among the Chinese, this same "chaotic" or "nebulous" cloud, said to have revolved "without fail," became known as Tao.¹ It was additionally described as the "Way of the Yellow Emperor,"² that is Huang-ti (variant, Shang-ti) we have already seen identified as the Saturnian deity.

In North America, the Yuki spoke of it as "fog" and/or "foam" that was said to have "moved round and round continually," which "fog" was also described by certain tribes in Indonesia. To the Pima it was "like a fluffy bit of cotton in the breeze."

Although, as noted above, the *mot* of the Phoenicians is normally translated as "mud," it can also connote "water." And this, as we have already seen, conforms with the source from which Creation unfolded as related in the Babylonian *Enuma Elish*. This is the same Egyptian chaos we have met under the deified name of Nu, 8 that also refers to "the primordial ocean" in which lay the germs of all that was to be created. 9

A much more detailed set of evidential material about this nebulosity has been supplied in our first volume of this series. ¹⁰ It was also there shown that accounts of this revolving chaotic fog, or foam, is not a specious way in which our primitive forefathers chose to describe the indefinable whirl that was seen circling around their nearby sun. ¹¹ That under certain conditions and scintillating illumination such an eddy could also have been visualized as swirling water, a whirling ocean, is also understandable. And since Creation was vouched to have sprung out of this celestial sea, it can be stated that it developed out of proto-Saturn's circumstellar disk. To explain what this really entailed compels us to continue our brief summary of what the proto-Saturnian system consisted of.

DIVINE INDEPENDENCE

Saturn has not only been tracked by man since prehistoric times,¹² it eventually became honored as the ruler of the planets.¹³ Much more than that, however, having been deified, it became man's primal god, especially since, for a while, it was his only one. From as far back as ancient man could remember, proto-Saturn was the only cosmic body that was visible in the sky. The present Sun was still too far away to have been seen, while the Moon had not yet been captured into orbit around Earth.

¹The Tao Teh Ching in L. Yutang, The Wisdom of China and India (N. Y., 1942), p. 596; L. Graham, Deceptions and Myths of the Bible (N. Y., 1979), p. 15.

² W. Chan, "Taoism,' Encyclopaedia Britannica (1959 ed.), Vol. 21, p. 796.

³ J. Bierhorst, The Red Swan: Myths and Tales of the American Indians (N.Y., 1976), p. 39.

⁴ G. H. Luquet, "Oceanic Mythology," New Larousse Encyclopedia of Mythology (London, 1972), p. 457.

⁵ R. Van Over, Sun Songs: Creation Myths From Around the World (N. Y., 1980), p. 28.

⁶ W. W. Baudissin, Studien zur Semitischen Religiongeschichte (Leipzig, 1876), pp. i, 11 ff., 195; G. Maspero, The Struggle of the Nations (London, 1896), p. 168.

⁷ J. Gray, Near Eastern Mythology (London, 1969), p. 117.

⁸ J. Viaud, "Egyptian Mythology," New Larousse Encyclopedia of Mythology (London, 1972), p. 11.

¹⁰ D. Cardona, God Star (Victoria, British Columbia, 2006), pp. 261-270.

¹¹ *Ibid.*, pp. 270-273.

¹² C. O. Choi, loc. cit.

¹³ M. Ratcliffe & A. Ling, "Saturn Rules the Night," Astronomy (January 2006), p. 60.

Proto-Saturn's prominence was further augmented through its peculiar position in the sky. It neither rose nor set, but sat immobile in one spot. That this was a belief that can be found in traditions from very ancient times can be established from one of the earliest names for the planet in question. In Akkadian, Saturn was *inter alia* known as Kaiamānu, derived from kānu, a word that signifies "to be firmly in place," or "to be stationary."

Saturn's immobility has exasperated mythologists in their attempts to fathom what ancient man was trying to relay to his descendants. That a planet would have appeared to be motionless in the sky is not a concept they could accept as having had physical reality. The best that they could do was relate Saturn's inertness to its present sluggishness in its circuit around the Sun, even though they knew too well that slow motion can hardly be said to be the same as immobility. Others felt better by downgrading the concept to a metaphor, despite the fact they could not tell what the metaphor alluded to.

The apparent stasis of a cosmic body can come about through phase-lock as in the case of Earth as seen from the surface of the Moon. On the strength of what our ancient ancestors have recorded, however, we have opted for an entirely different situation in which Earth had actually been positioned in axial alignment directly beneath proto-Saturn. In effect, the two bodies had been sharing the same axis of rotation. Proto-Saturn would thus have appeared to be permanently stationed in Earth's north celestial pole.

There are numerous texts in ancient records, to say nothing of oral traditions, that demonstrate the verity of the above assumption.² But, since we have already mentioned him in this very chapter, we will restrict ourselves to the Chinese Saturnian deity known as Huang-Ti. As we have seen, Huang-Ti was equated with the very chaos out of which Creation was said to have unfolded.³ As we have additionally noted, this same chaos was also known as Tao.⁴ It is therefore quite telling that this very Tao was said to have been located at the celestial pole.⁵ Besides which, Huang-Ti himself, who was also reverenced as Shang-Ti,⁶ continues to be honored as the Holy and Propitious Prince of the North Pole.⁷

POLAR TROPICS

The warmth that would have bathed the Arctic regions due to proto-Saturn's permanent fixture in Earth's north polar sky hardly needs further corroboration. And yet, even as we progress with our unfolding scenario, new discoveries continue to provide us with additional verification. Although evidence of the tropical environment that once gripped Ellesmere Island had surfaced in previous scientific reports, a comprehensive study of the region has

¹ D. Brown, Mesopotamian Planetary Astronomy-Astrology (Groningen, 200), pp. 68-69, as cited by E. Cochrane, On Fossil Gods and Forgotten Worlds (Ames, Iowa, 2010), p. 55.

² See the prequels to this work concerning this.

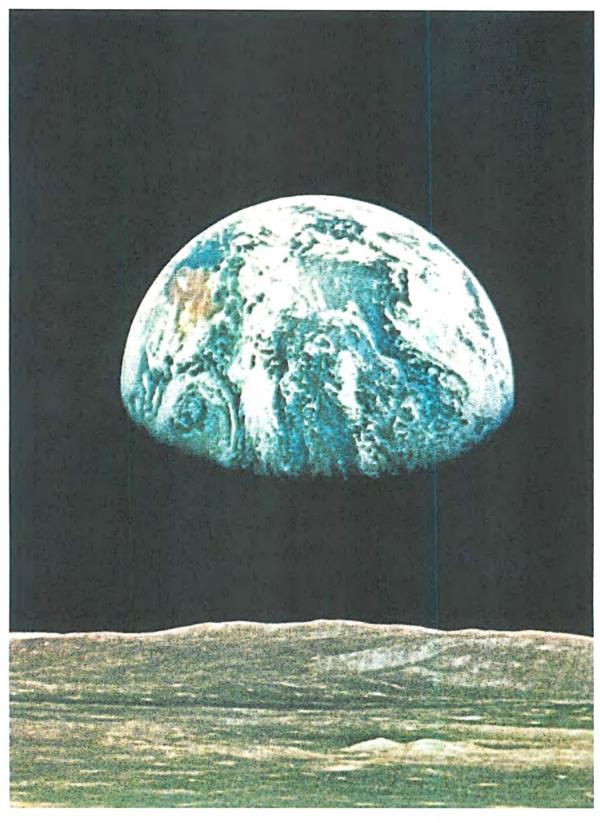
³ M. Soymié, loc. cit.; G. de Santillana & H. von Dechend, loc. cit.

⁴ L. Yutang, loc. cit.; L. Graham, loc. cit.

⁵ L. Hodus, "Taoism," Encyclopaedia Britannica, 14th edition, as quoted by I. Velikovsky, Worlds in Collision (N.Y., 1950), p. 256.

⁶ H. Maspero, "The Mythology of Modern China," Asiatic Mythology (N. Y., 1972), p. 339.

⁷ Ibid.



The motionless Earth as seen from the surface of the phase-locked Moon. (Photograph courtesy of NASA.)

again been conducted, the results of which have only tended to reinforce preceding ones. As before, what has been disclosed are the remains of a "lush, rainforest-like ecosystem" that was home to such warmth-loving creatures as alligators, hippopotamuses, and flying lemurs, "some 40 million years ago."

What continues to come to light is a habitat like Earth's present tropical latitudes even though, "40 million years ago," the island in question was already situated as close to the North Pole as it is today.²

What is unfortunate is that it continued to be believed that these animals thrived on flowers, leaves, and marsh vegetation during the summer months, while reverting to pine needles and fungi during "the long, dark winter months that marked life at Arctic latitudes—both then and now." It is, however, difficult to visualize how the now-extinct hippopotamus-like coryphodon could have survived on pine needles and fungi in what amounts to a prolonged night for the longest part of the year.

It gets worse. Studies conducted on tiny phytoplankton diatoms retrieved from sediments on a ridge in the Arctic Ocean continued to show that, during the Late Cretaceous, "when dinosaurs roamed the world," the Arctic Ocean was free of ice. But, according to Alan Kemp, who then hailed from the University of Southampton, this was mainly during the summer, even though, still according to him, winter was only demarcated by "intermittent sea ice." What the analysis revealed to Kemp and his colleagues is that "the Arctic climate of the Late Cretaceous varied over timescales with periodicities closely matching those observed in the modern Arctic." And: "It therefore appears that the Arctic was subject to some of the same climatic influences in the Late Cretaceous as it is today..." One actually wonders how the Arctic could have been much like today with the subtropical forests and warmth-loving creatures it previously harbored—even if it did have intermittent ice in winter, which we severely doubt.

Earth's primordial tropical climate was not restricted to Arctic regions. It enveloped the entire world, as ascertained even by those who are well acquainted with Earth's former fainter sun. While still believing Earth to have had a "chilly beginning," Aaron Gronstal, who then acted as one of NASA's astrobiology integration officers, could still claim that "the surface of the earth was ice-free." And this included the now permanently frozen southern continent of Antarctica.

"Thirty-eight million years ago," according to the National Science Foundation, "tropical jungles thrived in what are now the cornfields of the American Midwest and furry marsupials wandered temperate forests in what is now the frozen Antarctic."

¹ R. Boswell, "An 'Amazing Place' in Prehistory," The Vancouvcer Sun (February 11, 2012), p. B1

² Ibid.

³ Ibid.

⁴ R. Howlett, "Arctic Climate Variation Under Ancient Greenhouse Conditions," eurekalert.org, public release (February 11, 2011—emphasis added).

⁵ Ibid.

⁶ Ibid.

⁷ A. L. Gronstal, *loc*, *cit*.

⁸ C. Dybas, "Significant Role of Oceans in Onset of Ancient Global Cooling," National Science Foundation, Press Release (May 26, 2011).



The ice-bound mountains of Greenland's Arctic that was ice-free during Earth's past ages. (Photograph by the author.)

Just like the Arctic, the Antarctic was also inhabited by dinosaurs. "If we were trying to find evidence" of these creatures "doing something much different physiologically, we would expect it to be found in dinosaurs from an extreme environment such as the South Pole," commented Holly Woodward when she was still a graduate student at Montana State University. But, based on the bone tissues of some of these southern dinosaurs, she found reason to state that "dinosaurs living within the Antarctic Circle were physiologically similar to dinosaurs living everywhere else." And yet, it was still declared that these Antarctic dinosaurs actually lived "in the dark for months at a time."

The dinosaurs that Woodward commented upon were only dog-sized creatures.³ But then we come across the two-legged therapods the tracks of which were found etched in sandstone in an Australian region that is believed to have previously been joined to Antarctica.⁴ Therapods are not only believed to have been carnivorous, they included some of the largest dinosaurs that ever lived, among the *smallest* of which was the well-known Tyrannosaurus Rex. They, too, are said to have roamed Earth's southern polar regions "in prolonged polar darkness."⁵

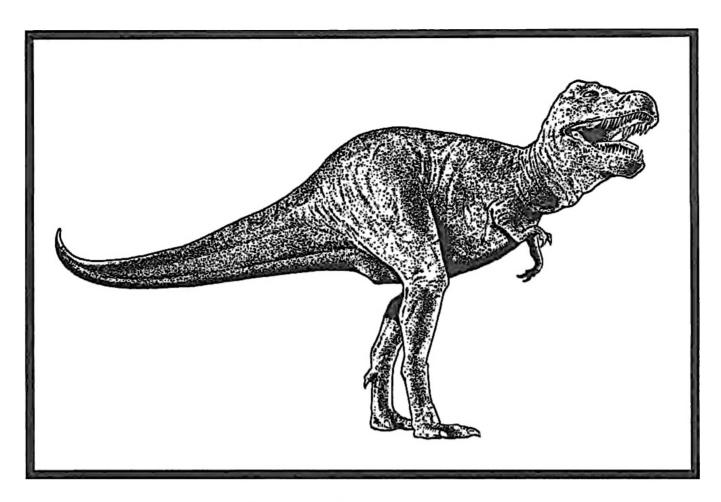
¹ "Light Shed on South Pole Dinosaurs," sciencedaily.com (August 5, 2011).

² Ibid.

³ Ibid.

⁴ C. Clark, "Polar Dinosaur Tracks Open New Trail to Past," esciencecommons.blogspot.com (August 9, 2011).

⁵ Ibid.



Tyrannosaurus Rex—among the smallest of therapods that thrived in Earth's southern polar regions.

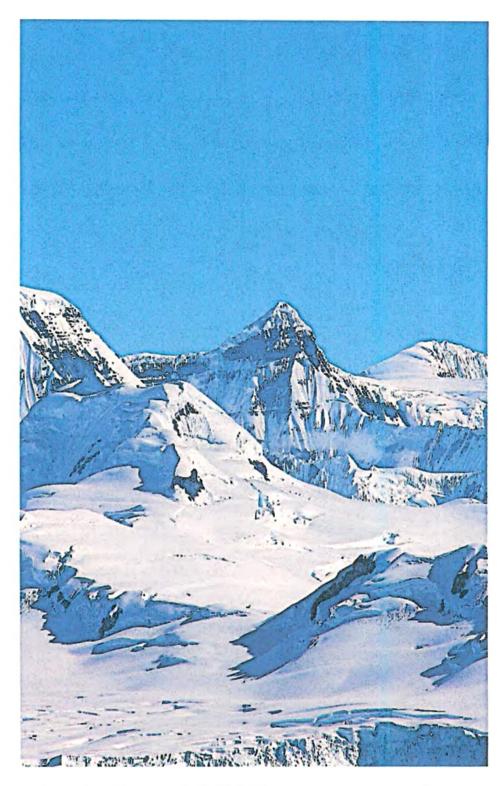
(Illustration by Bob Giuliani.)

Fossils of long-necked, four-legged sauropods have also come to light in Antarctica. And although the first such fossils to be discovered on James Ross Island in that continent were "too incomplete to be given an exact name," they were found to be "distinctive enough to identify as belonging to a branch of sauropods called titanosaurs," some of the heaviest creatures to ever walk on Earth.

Our own stand on this matter is the same as that of John Tarduno who was adamant in his claim that the Arctic was warm and ice free all year round. With our own contention that Earth's primordial brown dwarf sun had been permanently suspended above the north polar region, such perpetual warmth within the Arctic Circle is easily accounted for. How this northern stellar fixture managed to illuminate and warm Earth's southern hemisphere, including the south pole, however, is not only another story, it is also one that has raised objections from some of our own supporters.

¹ "Antarctic Fossil Shows Sauropod Dinosaurs Were Global," newscientist.com (January 9, 2012).

² M. Wall, "Tropical Turtle Fossil Discovered in the High Arctic," Wired Science at blog wired.com (February 1, 2009), p. 1.



Antarctica, where not a single blade of grass now grows, was once home to furry marsupials who wandered through temperate forests.

(Photograph by the author.)

THE PROTO-SATURNIAN PLASMASPHERE

During the early time we are presently concerned with, not only were the Sun and Moon absent from the sky, so were the stars. The Sun, as we have said, was still too far away to be distinctly seen by ancient man, while the Moon had not yet been captured around Earth. But with an Earth that was dimly, even if warmly, bathed by a faint brown dwarf star while traveling outside the demarcation of the Solar System, the stars should have littered the sky above. That they did not—and the mytho-historical record is adamant about this—was due to the plasmaspheric sheath within which the proto-Saturnian system was encased. Such plasmaspheres are known to enclose various systems out in space. The one enfolding the Solar System, centered on our present Sun, is known as the heliosphere. The reason it does not hide the stars from view, whereas the one around the proto-Saturnian system did exactly that, has to do with the electrical potential of plasmaspheres in relation to that of their immediate surroundings. When these potentials are of unequal value—see more below—a plasmasphere's inner surface can be rendered opaque, thus acting as a curtain that shields whatever lies outside its borderline. Thus were the stars shielded from view to those on Earth. This same opaque boundary was also the very cause behind the reflection of Proto-Saturn's dim light and heat to all of Earth's surface, including its southern hemisphere.

It is this reflection that has failed to meet total acceptance by some of our supporters. Wallace Thornhill, for one, has made it clear that he does "not subscribe" to this idea. And yet he is still of the opinion that it was proto-Saturn's magnetosphere that was responsible for Earth's past encircling warmth. It was, according to him, this "glowing shell" that radiated heat and light to its satellite. Any cosmic body within that shell, he maintains, would "receive the same energy per square meter over its entire surface, regardless of its rotation rate, axial tilt and orbit eccentricity."

While directly related, a magnetosphere is not the same as a plasmasphere—see more on this below. Thus what Thornhill actually means is that Earth would have actually been situated within proto-Saturn's anode glow—in other words, within its very glowing sphere. As he, together with David Talbott, has elsewhere written, "the radiant energy arriving on a satellite orbiting inside a glowing sphere is evenly distributed over its entire surface."

With radiant energy distributed over the entire surface of such a planet, seasonal as well as latitudinal differences in temperatures would not exist. In fact, Thornhill stresses the point that, on a planet orbiting a brown dwarf within its anode glow, there would be "no seasons, no tropics and no ice caps."

Our own theoretical construct in which proto-Saturn's heat and light was reflected off the inner surface of its plasmaspheric shell did not originally come from an astrophysicist, but from Roger Ashton, a dilettante that had once been an avid supporter of the Saturnian configuration model before he disavowed it all. And yet, in more than one respect, he antici-

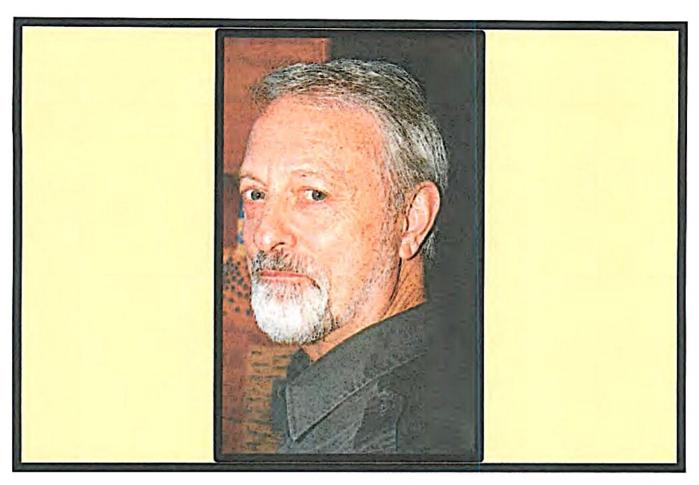
¹ W. Thornhill to D. Cardona, private e-mail (June 5, 2011).

² Ibid

³ W. Thornhill & D. Talbott, The Electric Universe (Portland, Oregon, 2007), p. 84.

⁴ Ihid

¹ See D. Cardona, loc. cit., pp. 297-298.



Wallace Thornhill who adheres to a different theory concerning the manner in which Earth was globally heated in primordial times.

(Photograph—2006—by the author.)

pated what was yet to be discovered. He was definitely on the mark when he described proto-Saturn's sheath as a magnetosphere, the "distinctive layer" of which would have consisted "of a plasma" that would have been "opaque to visible light." Given that magnetospheres are not the same as plasmaspheres, one can still understand that a magnetosphere could be embedded within a plasmasphere.

That Ashton's proposition was not a wild attempt at solving what was then a nagging problem was later demonstrated by the plasma physicist Anthony Peratt when he disclosed that plasmaspheres "indeed can vary between transparent and opaque at different wavelengths."

The question, then, boils down to this: Can the opaque inner surface of a plasmasphere reflect energy? According to Donald Scott, if the frequency of a ray or wave of energy happens to be higher than that of the plasmatic structure it attempts to penetrate, it flows

¹ R. Ashton to C. J. Ransom, private communiqué, cc. to D. Cardona (September 8, 1981).

² D. E. Scott, *The Electric Sky* (Portland, Oregon, 2006), p. 129.

³ A. L. Peratt, on the Intersect electronic discussion group sponsored by KRONIA Communications (April 26, 2002).

through the plasma as if it was transparent. But if it is the frequency of the plasma that happens to be higher, the ray or wave of energy is either absorbed or rebounded off its surface. "This is why radio waves are reflected back from different plasma layers in Earth's upper atmosphere." As he tells us, it is precisely this effect that "enables intercontinental radio communications" to take place.

What is highly interesting is that Thornhill himself found reason to highlight the existence of such opaque boundaries as he distinctly indicated when discussing SETI's failure to detect any radio signals originating from outer space. As he rightly cautioned, this lack must not be mistaken for the absence of intelligent extraterrestrial life. "The problem for SETI," he well understood, "is that no radio signals could penetrate the glowing plasma shell" encasing any planet on which such life could possibly exist.⁴

One major problem with Thornhill's model is that a planet immersed in a brown dwarf's glowing sphere does not merely make for a world without ice caps, as he reported,⁵ it would also make for one that could not have experienced an ice age, let alone an entire series of such ages with all that they tend to bring with them. The physical signatures that past ice ages have etched into Earth's tortured surface, however, are much too prominent to be disregarded.

One other problem is that Thornhill's model depicts the exemplary world, or satellite, within a brown dwarf's red anode glow as *orbiting* around the dwarf,⁶ with such a world having no latitudinal temperature differences. As he had earlier written: "Another interesting consequence is that all objects orbiting [in such a region] would receive the same energy per unit area of their surface." Geological, glaciological, and paleontological evidence, however, contests this by indicating that Earth's northern region had always been warmer than more southerly latitudes. And this is understandable when one considers that, contrary to Thornhill's model, primordial Earth was not in orbit around proto-Saturn but lay suspended directly beneath its southern pole while sharing the same axis of rotation.

Such a linear system would definitely have resulted in latitudinal differences in temperature. This is because Earth's northern hemisphere, especially its north polar regions, would have received direct heat and light from proto-Saturn while also receiving a lesser amount through plasmaspheric reflection. Earth's southern hemisphere, on the other hand, would only have been the recipient of proto-Saturn's lesser reflected radiating energy.

Various lines of evidence can be supplied in favor of such latitudinal difference and, in our past volumes, we have supplied more than enough. Thus, not only did certain species of both flora and fauna appear earlier in Arctic regions than they did in more southerly latitudes,¹

¹ D. E. Scott, op. cit., p. 75.

² Ibid.

³ Ibid.

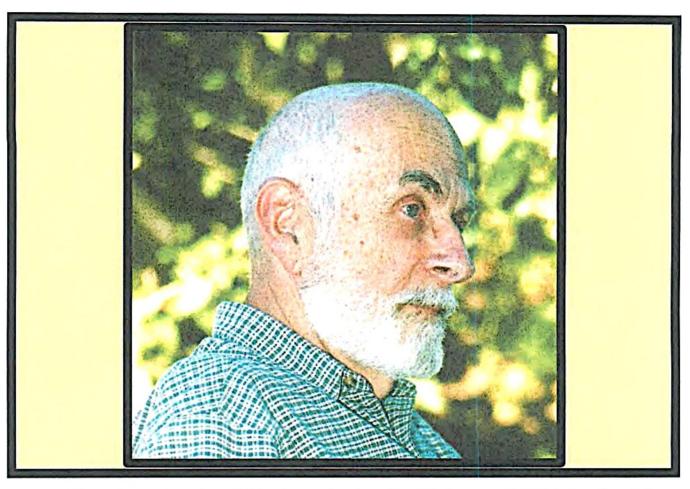
⁴ W. Thornhill & D. Talbott, loc. cit.

⁵ Ibid.

⁶ Ihid.

⁷ W. Thornhill, "Stars in an Electric Universe," AEON V:5 (January 2000), p. 48.

¹ H. Thurston, "Icebound Eden," Equinox (May-June 1986), p. 80; I. C. Johnson, "Anomalous Occurrence of Crocodilia in Eocene Polar Forests," Chronology and Catastrophism Review, XIV (1992), pp. 8, 11; J. D. Archibald, Dinosaur Extinction and the End of an Era (N. Y., 1996), p. 197.



Donald Scott: Energy can rebound off a plasmasphere's surface if its frequency is higher than that of the energy in question.

(Photograph—2005—by the author.)

Earth's earliest signs of life have so far been discovered within the Arctic Circle,¹ evidence of which continues to come to light.² Latitudinal differences also made for the larger size of the same dinosaurian species in the Arctic, some of which were twice as large as their siblings in more southerly locations.¹

Effects of this primordial latitudinal difference have actually sent paleontologists back to their drawing boards. Among such matters one can include the evolution of dinosaurian respiratory capabilities. Thus, according to the biologist Richard Hengst, the manner in which the ribs of certain therapodian skeletons are attached to their vertebral column determines the efficiency of their respiratory system. What his study brought to light is that a number of carnivorous therapods improved their breathing abilities through the ages. It therefore seemed

¹ M. Harrison, "In Search of Akilia's Heel: The Controversy Over the Earliest Evidence for Life on Earth," paper given at the seminar sponsored by the School of Earth Sciences at the Australian National University (September 25, 2003); J. D. Archibald, *Dinosaur Extinction and the End of an Era* (Columbia University, 1996), p. 197.

² J. W. Valley, "A Cool Early Earth," *Scientific American* (October 2005), p. 60; R. Boswell, "Mount Slipper Fossils Among Earliest Animals," Canwest News Service in *The Vancouver Sun* (February 10, 2010), p. B2.

A. R. Fiorello, "The Dinosaurs of Arctic Alaska," Scientific American (December 2004), p. 91.

evident to Hengst that there must have been "some kind of pressure on these dinosaurs to become more aerobically active over time."

Judging by the geologic strata in which they were found, however, the skeletons of similar southern therapods indicate that they were "lagging behind their northern relatives in aerobic fitness." Improvements in their breathing abilities occurred at a much later time.² Hengst could not come to a definite conclusion concerning the reason behind the difference in the respiratory rates between these species and their northern counterparts. That the North American therapods had evolved into more active type of hunters much earlier than their kin in South America, thus requiring a set of better breathing organs, that he half-heartedly suggested,³ does not make paleontological sense, and he knew it—which is why he appended his conclusion with the telltale words "whatever the reason."

It is not that Thornhill does not subscribe to Earth's axial alignment with proto-Saturn. He does, but he has held steadfast to the idea that this resulted from the break-up of the proto-Saturnian system as it entered the Sun-dominated influence of the Solar System. As he himself described it, this would have been akin to the break-up of Comet Shoemaker-Levy 9 in July of 1994.⁵

As is now well known, Jupiter's gravitational tug pulled the comet apart into a linear formation consisting of twenty-one separate fragments that have been likened to a row of pearls on a string. Thus, according to Thornhill, the linearity of the proto-Saturnian system "could not have been primordial."

As it is, not enough is yet known about the properties of spatial magnetospheres and even less of plasmaspheres. Even when it comes to the plasmasphere surrounding our present Sun, lack of precise knowledge leaves astrophysicists in doubt concerning its actual shape. Thus, in 2007, it was widely heralded that the spacecraft Voyager 2 had *proved* that the Sun's plasmasphere, that is its heliosphere, is "squashed" or "dented," which means elongated. And yet, two years later, instruments on a different spacecraft, this one named Cassini, indicated that the heliosphere may actually be perfectly spherical. The Sun, it was then reported, travels through the galaxy inside "a big, round bubble." If we cannot yet ascertain the shape of the present solar plasmasphere, how can we be positive concerning the one that enveloped Earth's previous sun?

The only thing we can be positively sure of, as I hope to have adequately shown above and throughout my previous works, is that Earth had basked in sub-tropical warmth for most of its existence, and that its northern polar region had even been warmer than its more southerly latitudes. What this really spells out is that Earth must have been stationed beneath

¹ "Purdue Study Finds Prehistoric Couch Potato," sciencedaily.com (October 10, 1997).

² Ibid.

³ Ibid.

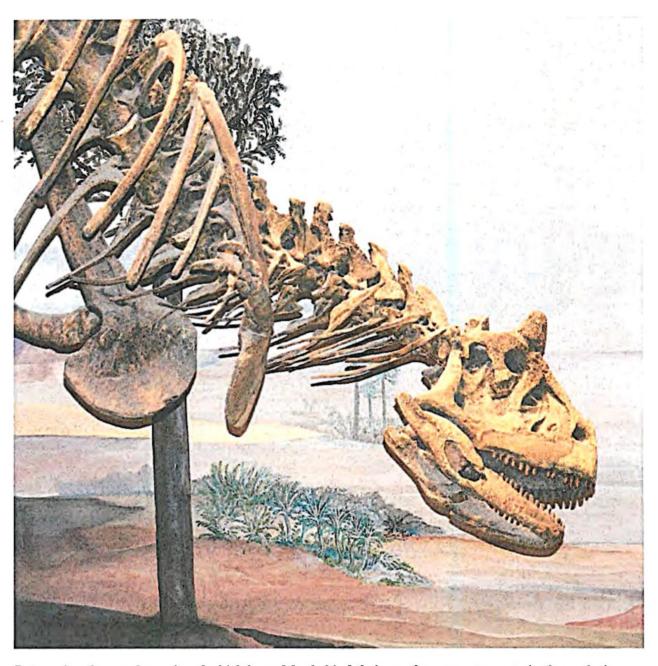
⁴ Ibid.

⁵ W. Thornhill, "Stars in an Electric Universe," AEON V:5 (January 2000), p. 49.

⁶ Idem, "The Electric Saturnian System," AEON VI:1 (February 2001),p. 36.

⁷ "Voyager 2 Proves Solar System is Squashed," sciencedaily.com (December 13, 2007).

¹ "New View of the Heliosphere: Cassini Helps Redraw Shape of Solar System," sciencedaily.com (October 18, 2009).



Patagonian therapod, species of which lagged far behind their northern counterparts in the evolutionary improvement of their aerobic fitness.

(Photograph by the author, courtesy of the Egidio Feruglio Paleontological Museum, Trelew, Argentina.)

the north celestial placement of a stationary source of heat and light that not only hearkens back to primordial times, but to Earth's very inception.

CYCLICAL CONUNDRUMS

With an Earth suspended directly beneath the proto-Saturnian sun, the recurrence of day and night, to say nothing of seasonal change, would not have been possible. And yet, these recurring changes are believed to have been required for the inception and maintenance of



The linear break-up of Comet Shoemaker-Levy 9 in July 1994. (Photograph courtesy of NASA.)

life. According to Andrew Gracey: "Everything is tied to the rotation of the planet," and that "the rising and setting of the sun drives life on Earth." This was purportedly proven by a series of experiments involving mussels conducted by researchers at the University of Southern California.

Mussels are a species of mollusks, or clams, that inhabit shallow waters where they are cyclically exposed to the air through the ebb and flow of oceanic tides. When exposed above water, they close their shells and switch to an anaerobic metabolism. They can only "breathe" and feed during those periods in which they are submerged. Quite understandably, this led to the belief that their genetic expression must be tied to these very cycles.

During the experiments mentioned above, mussels were submitted to artificial tides in six-hour cycles, but their rhythmic genetic expression showed that they were not really tied to tidal rhythms, but, rather, to the circadian cycle, in other words the 24-hour day.³ To be sure, however, not all of the genes belonging to the mussels used in these experiments showed these rhythmic expressions.⁴ Besides which, of those that did, only "between 80 and 90 percent" indicated that they were driven by the circadian cycle.¹ Such deviations do not make for validation.

More than that, and as trite as it may sound, a twenty-four hour cycle can only be in force among living organisms if there is a twenty-four hour cycle in existence to start with. In other words, the experiments in question could only resolve the rhythmic genetic expression of present day mussels. They have nothing to offer concerning the past. They do not prove that the cycle of day and night is, or ever was, necessary for the origin of life or its conservation. After all, proto-Saturn aside, Earth's rate of spin is believed to have varied in the past.² While

¹ R. Perkins, "Day/Night Cycle Even More Important to Life than Previously Suspected," *eurekaalert.org* (Septemner 12, 2011).

² Ibid.

³ Ibid.

⁴ Ibid.

¹ Ibid.

² R. W. Fairbridge, "Eustatic Changes in Sea Level," *Physics and Chemistry of the Earth* (London, 1961), p. 108; H. Alfvén & G. Arrhenius, *Evolution of the Solar System* (Washington, D.C., 1976), pp. 147, 154, 156, 163; R. Lyttleton, "Mountains Come From Earth Shrinkage," *Quarterly Journal of the Royal Astronomical Society* (June 1979), p. 243.

some authorities have been vouching for a past increase in Earth's rotation, others have been just as adamant in proclaiming a decrease, either one of which would have made for a series of circadian cycles that would have differed in their length.

Fair enough, it can be claimed that, had the circadian cycle differed, so would the genetic expression of whatever life may have relied upon it in the past. But let us, temporarily, forget about the past and look to the very present. How could the genetic expression of Arctic animals be reliant on the circadian cycle when the Sun in this region can be absent from the sky for close to six months each year? What sort of circadian cycle is that? And, please, do not point to the difference between mussels and reindeer, or polar bears for that matter, because genetic expression is common to all life.

As it happens, different studies had already shown that Arctic reindeer have "abandoned use of the internal clock that drives the daily biological rhythms in other organisms." In other words, they have no use for the genetic expression of our discussion. "Our findings," claims Andrew Loudon, "imply that evolution has come up with a means of switching off the cellular clockwork" of these animals and that their maintenance "may not involve circadian mechanisms." While admitting that these "findings initially came as a surprise," it is now suspected that "similar patterns will be uncovered in other Arctic animals." That is all fine and dandy, but if life at present can do without the reliance on such physiological rhythms, so could life have done so in the past.

In our scenario, with the absence of the Moon, tides, too, would have been nonexistent, so that the genetic expression of mussels and other mollusks could not have originally been reliant or subjected to oceanic ebbs and flows.

What about the lack of seasons?

In trying to discover whether extrasolar planets can be inhabited, astrobiologists have been researching the axial tilts of such worlds in order to compare their resultant seasonality to that of our world. "The fact that life can exist at all on Earth," it has been claimed, "is closely tied to seasonality." It has thus been reasoned that Earth-like exoplanets around red dwarf stars would not be good candidates for life even if they orbit within the dwarf's habitable zone. This was inferred through computer simulations that have shown the gravitational pull of red dwarfs has a tendency to "grind away" at the axial tilt of any planet within its habitable zone until it is completely eliminated. As it has been claimed: "This temperature-moderating tilt is nullified in such a short time that life may never have a chance to get going."

¹ P. G. K. Kahn & S. M. Pompea, "Nautiloid Growth Rhythms and Dynamical Evolution of the Earth-Moon System," *Nature* (October 19, 1978), p. 607.

² P. S. Wesson, "The Implications for Geophysics of Modern Cosmologies in which G is Variable," *The Quarterly Journal of the Royal Astronomical* Society (March 1973), pp. 46, 52, 53; H. Alfvén & G. Arrhenius, op. cit., p. 458; W. A. Mitchell, "Ancient Astronomical Observations and Near Eastern Chronology," *Journal of the Ancient Chronology Forum*, Vol. Three (1989/90), pp. 8-10.

³ "To Arctic Animals, Time of day Really Doesn't Matter," sciencedaily.com (March 11, 2010).

⁴ Ibid.

⁵ Ibid.

¹ A. Hadhazy, "Alien Life May Depend on Planetary Tilt," ASTROBIOLOGY MAGAZINE at astrobio net (January 20, 2012).

 $^{^2}$ Ibid.

"On the other hand, terrestrial planets around sun-like stars fare much better," it has additionally been claimed. "These worlds should not see their axial tilts erode to dangerously low levels until many billions of years down the road, well after life has had a chance to arise and possibly evolve into technological civilizations."

And yet, the very same researchers are well aware that Earth itself has more than probably changed its obliquity "over geological time," although to what extent remains "a matter of debate." Besides which, and let us be perfectly clear about this, while Earth's axial tilt is an astronomical verity, the seasonal divisions it supposedly causes are anything but strictly demarcated. Truth be told, seasonal temperatures pay no attention to the inclination of Earth's axis. Parts of spring can be as cold or as warm as winter or summer, as so, also, can parts of autumn or fall. As noted in the first volume of this series, climate depends on shifting winds, themselves reliant on the evaporation of oceanic water and the particular topography of the land. In tropical latitudes, the alteration of rainy and dry days, which do not necessarily correspond to winter or summer, is more important than temperature. Equatorial regions can experience two rainy seasons and two dry seasons per year, the length and intensity of which also depends on the relief of the land and exposure to winds from different directions. Thus, while the official seasons are tied to the astronomical calendar, climates and temperatures are not all that dependent on Earth's axial tilt. How, then, can seasons be said to be necessary for the propagation and sustenance of life?

Even when it comes to the exoplanets that led to the above surmise, not everyone agrees. According to some, life can still ensue and propagate despite the extreme conditions on planets bereft of both circadian cycles and seasonal variations.³ If so on exoplanets, why not on Earth?

In the meantime, there have been various debates concerning the reason behind the changes in Earth's climate that led to the shift from its primordial tropical environment to the present cooler one, with new research favoring the Antarctic Circumpolar Current as having played a major role.¹ But while the work conducted by Miriam Katz and her colleagues has been claimed to be "the first to demonstrate that the basic structure of currents associated with modern ocean circulation has existed for the past 33 million years," Susan Lozier had earlier shown that this concept is all awry.³ Or how easily we forget.

¹ Ibid.

² Ibid.

³ K. Croswell, "Red, Willing and Able," New Scientist (January 27, 2001), pp. 29-30.

¹ C. Dybas, loc. cit.

² Ihid

³ M. Basgall, "Oceanic Circulation Doesn't Work as Expected," physorg.com (May 13, 2009).

Chapter 4

Axial Polarity

THE PILLAR ON TOP OF THE WORLD

ustained plasma discharges in the form of Birkeland currents, usually referred to as astral jets, are now known to be axially emitted from galactic and stellar bodies including brown dwarf stars. That the brown dwarf star that acted as Earth's primordial sun emitted such a jet—or, at least, a scaled-down version of one—is more than implied by the mytho-historical record. As far as mankind was concerned, this so-called jet appeared as a slow-twirling narrow beam of tapering light that seemed to connect the proto-Saturnian orb to Earth's north polar region.¹

Despite his non-planetary interpretation of the mytho-historical record, Marinus van der Sluijs could hardly miss the reports concerning the north-polar locality of the portents and events that so awed our ancient forebears. Yet, even then, he could best visualize this polar centrality as having risen at a later time in order to accommodate what had by then become confused by those who had not witnessed the occurrences with their own eyes. In other words, as far as he is concerned, the designations applied to the locality in which the events took place would eventually have become misunderstood as Earth's north celestial pole. "At different points in time and in different cultures," so he wrote, "the celestial pole eventually emerged as perhaps the natural place in the night sky best suited to convey the sense of a celestial 'centre' irrespective of one's location on earth." And:

"As seen from any point on earth, the direct vicinity of the pole of heaven is the sole region in space that is visible from earth throughout every night and does not noticeably change its position. Accordingly, ancient traditions have frequently regarded the pole not only as the centre, but also as the ultimate point of stability and rest and a virtual pivot of creation."

To be sure, van der Sluijs had not always been opposed to the planetary nature of the events portrayed within the convoluted confines of the mytho-historical record, as some of his earlier publications clearly show.² Even when it comes to the *axis* under discussion, he was not originally adverse to its polar location.³ Nor can it be said that he displayed much diffidence in his research upon the subject, especially in relation to the different patterns of activities that the *axis* is known to have gone through. "Up until today," he wrote, "hardly any

¹ D. Cardona, God Star (Victoria, British Columbia, 2006), pp. 429-439.

² M. A. van der Sluijs, *Traditional Cosmology*, Volume Two (London, 2011), p. 113 (emphasis as given).

¹ *Ibid.*, p. 114.

² See, for example, *idem*, "The Double Axe and the Celestial Twins," *AEON* VI:2 (December 2001), p. 71; *idem*, "The Hero's Garment," *AEON* VI:3 (November 2002), pp. 115-117.

³Idem, "The Cosmic String of Pearls," AEON VI:4 (August 2003), p. 46.



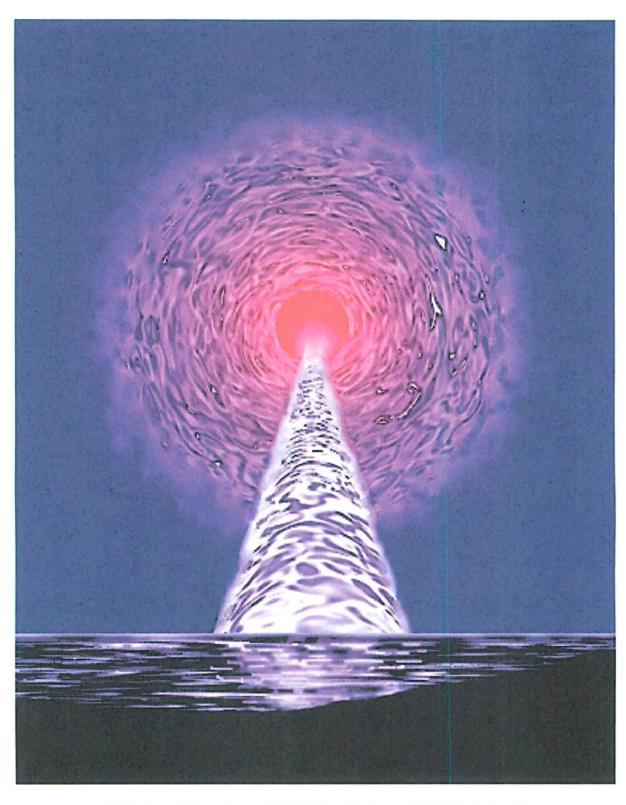
Jetting brown dwarf star and circumstellar disk.
(Artistic impression courtesy of ESO.)

of these phases has been acknowledged systematically in the literature and my research can suitably be described as the first thorough and comprehensive analysis of the world axis in what you might call an anatomical and morphological study."

In time, however, he began to waver in his assessment of the axis mundi's celestial location. Thus, at the very beginning of a paper he had published in 2005, he began by stating that the mythological axis mundi "can be explained by reference to a once visible entity in the sky, with a complex, evolving morphology and a possible link to the zenith or the pole." And yet, some pages later, while still stressing that the "detailed correspondences" between such diverse cultures as ancient Mesopotamia and the rainforests of Amazonia concerning the

¹ Idem, "Plasma Mythology," Chronology & Catastrophism Review (2004:2), incorporating Chronology & Catastrophism Workshop (2004:3), p. 47 (emphasis added).

² Idem, "The World Axis as an Atmospheric Phenomenon," Cosmos: The Journal of the Traditional Cosmology Society, 21 (2005), p. 3 (emphasis added).



Ideal representation of proto-Saturn's *axis* mundi and circumstellar disk. (Illustration by Richard M. Smith.)

sacred pillar "cannot be explained as a flight of fancy," he also indicated that the "pillars" enumerated in mythology are "sometimes associated with the world centre, the astronomical axis or the pole, but often not." The "dominant themes in this history," he tells us "appear throughout the world with great consistency and it seems unlikely that so many different cultures were prone to such similar fantasies." As he goes on: "This distribution suggests that the notion of a radiant pillar in the sky has existed around the world and since the dawn of civilization." And yet, still according to him, it "was only explicitly connected with the pole in a few cultures as it evolved along with the rise of astronomy." The "connection with the pole," he thus concludes, "seems not to have emerged before the 1st millennium BCE."

Three years after having stated the above, he reverted back to his original understanding as is shown in his analysis of the European cultural festival involving the maypole as a commemoration of Earth's past axis. As he there stated, "the listed characteristics for the sacred pole dovetail to a fine level of detail with the modeled behaviour of a high-energy auroral pillar that people may have seen in the polar skies towards the end of the Neolithic period." So, similarly, in his study of Mircea Eliade's investigation of the subject. Fair enough, he did exhibit caution in that tract when he claimed that "the polar location of the sky pillar is rarely specified." Nevertheless, as "rarely specified" as he might believe it to have been, he still presented this "hypothesized plasma tube" as having "once emanated from one or both of earth's magnetic poles." 10

By 2012, he had stopped wavering back and forth, having firmly dug his heels against the original location of the axis mundi at Earth's north celestial pole. As he declared in the major work he published in that year, "the visual prototype of axis mythology—the celestial object the mythmakers were describing—was not aligned with the polar axis mundi in the astronomical sense of the word." It "had not," according to him, "originated with the pole." 12

STELLA POLARIS

Despite the above, it cannot be denied that the pillar that was said to have supported the sky was identified with the North or Pole Star even though there is absolutely nothing about the star itself that connotes such a support. This was true among the Mongols, as also among

¹ *Ibid.*, p. 20.

² Ibid., p. 21 (emphasis added).

³ *Ibid.*, pp. 20-21.

⁴ *Ibid.*, p. 22.

⁵ Ibid.

⁶ Ibid.

⁷ Idem, "Bringing in the May," thunderbolts.info/tpod (October 7, 2008) emphasis added.

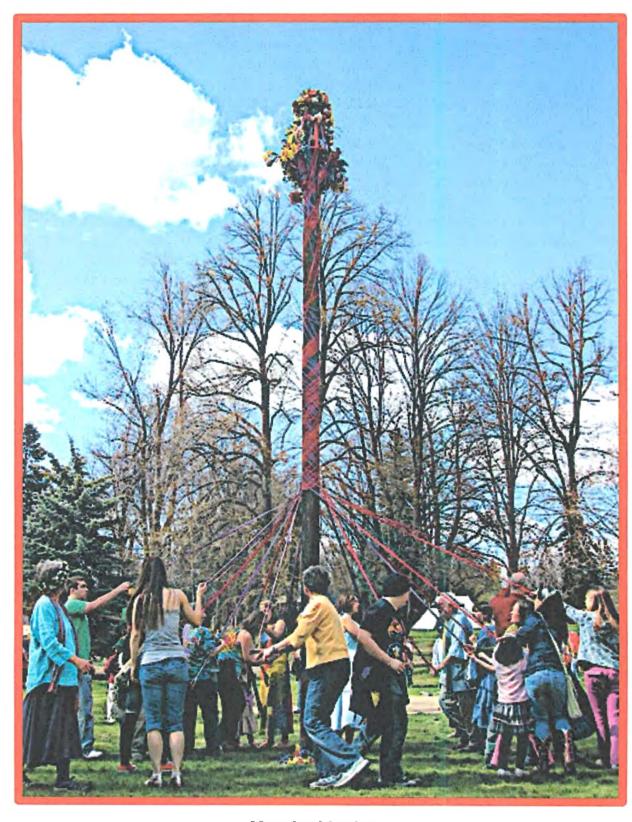
⁸ Idem, "More Than Meets the Eye," thunderbolts.info/tpod (February 10, 2010—re-posted on August 18, 2010).

¹⁰ Idem, "The Sunbeam of Yore," thunderbolts.info/tpod (September 14, 2010, re-posted on February 25, 2011—emphasis added).

¹¹ Idem. Traditional Cosmology, Volume Two (London, 2011), p. 129.

¹² Ihid

¹ G. de Santillana & H. von Dechend, Hamlet's Mill: An essay on Myth and the Frame of Time (Boston, 1969), p. 219.



Maypole celebration.
(Photograph courtesy of Telepathicparanoia's photostream.)

the Lapps, whose name for the Pole Star is Veralden Tshuold, the "pillar of the world." 1

Like the Greek Atlas, the ancient Finnish god known as Ukko was also said to have upheld the firmament above. He was, in this respect, the very embodiment of the heavenly pillar under discussion. To clinch the matter, Ukko was also known as Taivahan Napanen, which means the "Navel of Heaven." This very navel, which had been known throughout the ancient world, was said to have been situated right "in the centre or Pole of heaven."

Among the Scandinavians, the heavenly support was known as Veraldar Nagli, which translates as the "World Nail," but which was also known as the *North* Nail. As far as the Samoyeds, and others, were concerned, the "nail of the sky" was the North Star. So, also, to the ancient Finns, the North Star was likewise known as Bohinavlle, "the nail of the north." The Lapps, too, believe that this north nail, their Boahje-naste, is what supports the sky.³

Van der Sluijs will immediately remind us that all the above mentioned attributes of the North Star as a sky pillar come from some of the northernmost countries from which the Pole Star appears "high enough in the sky for it to appear as a convincing 'summit' of a vertical column." Call me naive if you will, but I cannot see how the star in question, whether high or low, could have led people in these northern countries to envision it as the summit of a vertical column. More than that, however, I would like to ask how the same incongruous concept came to be imbedded in cultures farther south where the star in question does not appear all that high. After all, even in ancient Persia, what is now Iran, do we find the North Star having been known as the "Nail in the Middle of the Sky."

To van der Sluijs, this was an easy matter. What he calls "the inexorable concomitant shift of emphasis" from the undefined locality of the polar column to Earth's north celestial pole "attained a limited geographical spread, radiating out of Greece." As he then adds:

"Following Plato it found expression in the Neo-Platonic tradition, the sacred writings of the Zoroastrians, the Arabs, and—for the later period—the Indians, and affected Siberia, China, Japan, and other parts of the Far East under the influence of Buddhism."

The above explanation, however, constitutes diffusion at its best. And yet, as van der Sluijs himself tells us on the very same page, the "apparent universality of the dominant themes in this category further suggests that the original referent appeared in the sky, from where it could have been observed by many communities with no cultural connections between each other." And, as he had even earlier written:

¹ U. Holmberg, Finno-Ugric & Siberian Mythology, Volume Four of The Mythology of All Races (1964), pp. 221-222.

² W. F. Warren, *Paradise Found* (Boston, 1885), p. 218.

³ U. Holmberg, loc. cit.

⁴ M. A. van der Sluijs, loc. cit.

⁵ E. C. Krupp, Beyond the Blue Horizon (N. Y., 1991), p. 280.

⁶ M. A. van der Sluijs, op. cit., p. 25.

⁷ Ibid.

⁸ Ibid.

"The central challenge in comparative mythology is to account for the many similarities between traditions from different cultures and ages. This task is all the more daunting in cases where the pertinent cultures are not known to have been in touch with each other, even indirectly, and in those where the content of the shared themes is not immediately obvious from the perspective of the local culture or environment."

This brings us back to the influence of Buddhism that van der Sluijs claims to have diffused from India into "other parts of the Far East." The mythological traditions of the Pole Star in India, however, are mainly found in Hinduism. It is there that we encounter Dhruva, the Sanskrit name of the Pole Star, which name also means "post" or "stake." Besides which, how did Neo-Platonic tradition, or Buddhism, not to mention Hinduism, find its way across the ocean into Mexico where we come across the god Xiuhtecuhtli who was equated with the pivot of the sky, and thus equivalent to the heavenly post we have been discussing? Interestingly enough, this very god was also known as the Lord of the Pole Star.

Too late in time? Maybe as far as Mexico is concerned, but van der Sluijs well knows that the polar locality of the supreme deity stretches as far back as extant writing now allows us to explore.⁴ As he himself tells us: "The ancient Babylonians knew the celestial north pole, but whether they ever introduced the concept of the cosmic axis in their astronomical theory is extremely doubtful." We are not, however, concerned with whether or not the Babylonians "ever introduced the concept of the cosmic axis in their astronomical theory" but with the fact that they were familiar with the "celestial north pole." After all, long after the portents in question had entirely disappeared from the sky, they were still offering prayers and sacrifices to the Pole Star that had, by then, replaced their primal god whose name was Anu. Yet even this failed to convince van der Sluijs that the events narrated in the mytho-historical record had actually unfurled in Earth's north celestial pole. "It is not hard to see how the understanding of the celestial pole as the cosmic 'centre'," he went on, "could have arisen at a very early time and independently in different cultures." All of which does not square well with diffusion through the Neo-Platonic tradition and/or Buddhism.

What should also be kept in mind is that the term axis mundi was coined by mythologists and not by those who had witnessed the events in question since these long-forgotten ancestors would have had no astronomical awareness on which to base such a concept. Those who experienced the events merely described what they had seen portrayed against the backdrop of the sky. They did not, back then, have a word, or name, by which to designate Earth's north celestial pole, especially since that locality had been occupied by the only sun

¹ Idem, "Mythology at Stake," thunderbolts.info/tpod (September 13, 2011).

² V. S. Apte, The Practical Sanskrit-English Dictionary (Delhi, 1975), p. 531.

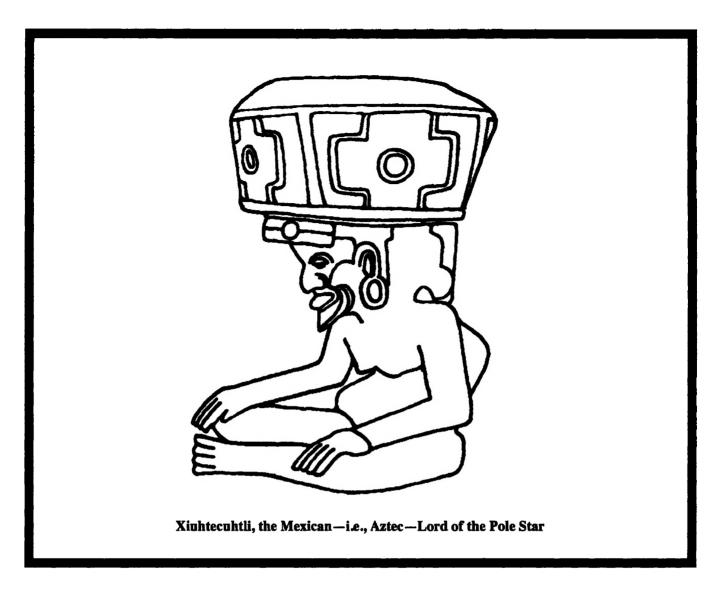
³ D. N. Talbott, op. cit., p. 58

⁴ M. A. van der Sluijs, *Traditional Cosmology*, Volume Two (London, 2011), pp. 114-115.

⁵ Idem, "The World Axis as an Atmospheric Phenomenon," Cosmos: The Journal of the Traditional Cosmology Society, 21 (2005), p. 4.

⁶ S. H. Langdon, Semitic Mythology, Volume V of The Mythology of All Races 9N. Y., 1964), p. 94.

⁷ M. A. van der Sluijs, op. cit., p. 115 (emphasis added).



they knew.¹ The stars, as noted, had not yet made their appearance; they could not, therefore, have been seen circling around a common center. It was only later—much later, in fact—when the proto-Saturnian sun had distanced itself from Earth that the stars came into view. It was then that the Pole Star claimed its unique seat in heaven. But that this particular seat had originally belonged to proto-Saturn continued to be claimed down through the ages.²

One must not therefore expect to encounter designations such as "north" or "north pole" in archaic sources, but, as mythologists through the years have ascertained through the well-tested process of comparative mythology, the allusions to that precise celestial locality as the seat of the high deity and his supporting column are more than simply evident. They can, in fact, be said to firmly establish the locality in question. This has been noted and stressed by quite a few mythologists despite the fact that they have not always realized what our ancient

¹ See D. Cardona, *Metamorphic Star* (Oregon, 2011), pp. 51-53 for a more detailed clarification of the above.

² See here especially the Hindu parable concerning Dhruva's inheritance of Earth's north celestial pole as told in the *Linga Purana* I:62:1 ff., 36.

forefathers were really emphasizing. Yes, mythologists might have found it difficult to accept that a cosmic body could have been immovably suspended in Earth's north celestial pole, let alone that a visible tapering swath of light would have connected the two of them, but the message concerning the phenomenon's north polar location, whether believed to have really occurred or not, cannot be mistaken.

INTENSE SOLAR OUTBURSTS

Van der Sluij's objections to the axis mundi's north polar placement was lent cogency, if not originally initiated, by Anthony Peratt's disclosures on the subject. But since I had already covered most of this in an earlier work, I shall not here go into a detailed replication of all that this study actually entails. However, since van der Sluij's publications continue to gain prominence, I feel bound to recap, even if briefly, how this all came to pass.

Peratt was somewhat hesitant when he was invited to present a paper on plasma cosmology at the World Conference sponsored by KRONIA Communications in September 2000. It was, however, at that very conference that he became aware of the similarities between the portrayal of certain mythological themes and the formations that plasma emanations were known to exhibit. When, later, he became familiar with the depiction of some of these themes as they appear in numerous petroglyphs from around the world, he convinced himself that the events described in the mytho-historical record had to have been plasmatic in nature. The more he delved into the subject, the more he realized that what ancient man had been witness to was a sequence of plasma instabilities that were projected against the backdrop of the sky. To use his own words: "Ancient people had recorded all the phases of a plasma discharge, a lightning stroke that must have been unprecedented in intensity and duration." which duration, according to him, would have lasted "at least a few centuries if not millennia."

Originally, Peratt, too, had accepted that the plasmatic discharge witnessed by ancient man was not only planetary, but also polar. In time, however, he, too, began to avoid any

¹ Among such mythologists and their works, once can name W. F. Warren, Paradise Found (Boston, 1885); J. O'Neil, The Night of the Gods (London, 1893); Z. Nuttall, Fundamental Principles of Old and New World Civilization (Harvard, 1901); A. J. Wensinck, The Ideas of the Western Semites Concerning the Navel of the Earth (Amsterdam, 1916); H. P. L'Orange, Studies in the Iconography of Cosmic Kingship (Oslo, 1953); M. Eliade, The Myth of the Eternal Return (London, 1955); G. de Santillana & H. von Dechend, Hamlet's Mill:An Essay on Myth and the Frame of Time (Boston, 1969); E. A. S. Butterworth, The Tree at the Navel of the Earth (Berlin, 1970); D. N. Talbott, The Saturn Myth (N. Y., 1980); J. Godwin, Arktos: The Polar Myth in Science, Symbolism, and Nazi Survival (London, 1993); and various others.

² D. Cardona, op. cit., pp. 71 ff.

³ D. Cardona, Flare Star (Victoria, British Columbia, 2007), p. 265.

⁴ Ibid.

⁵ *Ibid.*, p. 266.

⁶ A. L. Peratt, as reported on the University of Pennsylvania Museum of Archaeology and Anthropology "News release" in relation to the 2001 seminar titled "Celestial Catastrophes in Human Prehistory?"

⁷ Idem, "Characteristics for the Occurrence of a High-Current Z-Pinch Aurora as Recorded in Antiquity," IEEE Transactions on Plasma science, Vol. 31, No. 6 (December 2003), pp. 1211-1212.

⁸ See D. Cardona, *God Star* (Victoria, British Columbia, 2006), pp. 464-465.

association with planets, while favoring an emission of a columnar aurora, which explanation was later picked up by van der Sluijs.¹

Peratt was also influenced by an idea that had been promoted decades earlier by Thomas Gold concerning what might have actually transpired if solar outbursts in the past had been much more intense than those at present.² But, as Van der Sluijs himself acknowledged, Gold's hypothesis "was almost entirely speculative." In fact, it was nothing more than a thought experiment.

Despite all that, van der Sluijs assures us that Peratt has actually "supported" Gold's endeavor "with persuasive observational data." The observational data in question, however, come from the laboratory, and while such experiments should not be ruled out as evidence of what might have transpired in the past, in no way do they support Gold's speculation. Regardless of how persuasive Peratt's experiments appear to be, they do not prove that intense solar outbursts end up producing columnar auroras.

Although not as intense as Gold had speculated, violent solar outbursts have not been absent in more recent times, such as the one that is known to have taken place in 1859. But, although this outburst wrought havoc with the world's communication systems,⁵ while also igniting wide-ranging fires on more than one continent,⁶ the only effects it had on auroras was to dramatically enhance their manifestation and widen their range of appearance. Yes, in some areas, the resultant auroras managed to turn night into day, while spreading their celestial distribution farther south, very close to the equator.⁷ No auroral pillars are, however, known to have been formed. More than that, as indicated in a previous work,⁸ it is rather doubtful that columnar auroras can actually be formed through this particular method.

FALSE AURORAL PILLARS

In his endeavor to promote the auroral nature of the mythological axis mundi, van der Sluijs embarked on an extensive search through past literature in pursuit of columnar auroras. And he did come across some examples that he presented as possible evidence of such phenomena. Described as breath-taking shafts, or broad columns, of light, celestial pillars have been known to last "from a few minutes to over an hour." But that these pillars are actually auroras has never been ascertained. For one thing, they "usually appear in the eastern

¹ A. L. Peratt, op. cit., Part II, IEEE Transactions on Plasma science, Vol. 35, No. 4 (August 2007), in toto.

² T. Gold, "Large Solar Outbursts in the Past," *Pontificiae Academiae Scientiarvm Scripta Varia*, Vol. 25 (1963), pp. 159-174.

³ M. A. van der Sluijs, op. cit., p. 29.

⁴ Ibid.

⁵ S. F. Odenwald & J. L. Green, "Bracing for a Solar Superstorm," Scientific American (August 2008), p. 80.

⁶ R. R. Brittt, "Perfect Space Storm Could be Catastrophic on Earth, Study Concludes," *Space.com* (January 7, 2009).

⁷ S. F. Odenwald & J. L. Green, loc. cit.

⁸ D. Cardona, *Metamorphic Star* (Oregon, 2011), pp. 71. ff.

⁹ M. A. van der Sluijs, op. cit., p. 28.

¹⁰ W. R. Corliss, Lightning, Auroras, Nocturnal Lights, and Related Luminous Phenomena: A Catalogue of Geophysical Anomalies (Glen Arm, Maryland, 1982), pp. 7-8.

or western horizon" or, as in one case, coincidental with the axis of the zodiacal light, "well away from the zone where auroral activity normally occurs." As has been noted by William Corliss, these apparitions only resembled the auroras.²

To my knowledge, the plasmatic nature of the cosmic column under discussion was first proposed by Robert Driscoll in a lecture he delivered at the meeting of the short-lived California Society for Interdisciplinary Studies in January 1986.³ Although Driscoll's theory was heavily influenced by Immanuel Velikovsky's work on colliding planets, most of which has since been discredited, it still contained a certain amount of validity, even if in a most general way. Basing his theory on the flux tube that had been discovered stretching between Jupiter and its satellite Io, he spoke favorably about the exchange of electrical discharges between planets that had been posited by Velikovsky in the 1950s.⁴ In Driscoll's theory, the electric bolts that he envisioned passing between approaching bodies would have ended up forming "a long narrow charge inside a plasma sheath," which charge would have glowed "like a heavenly spear." As Irving Wolfe paraphrased Driscoll's conclusion: "A tube containing an oscillating current would have been seen, which might have been the cosmic column 'writhing' with the presence of many bolts."

What Driscoll described back then is now known to be electrically-charged streams of ionized particles that cause the high-speed plasma flows that are often referred to as cosmic jets. Once thought to constitute rare phenomena, these plasma flows are now known to be "extremely common across the Universe." As far as the present study is concerned, it was one of these so-called flows that constituted the sustained plasma discharge in the form of Birkeland current that once bridged the gap between Earth and its primordial polar sun—in other words, the polar column under discussion.

In the end, van der Sluijs was honest enough to admit that, at least at present, the plasma theory "raises more questions than it answers." But even here, I have to disagree. As far as I am concerned, it is not the plasma theory that is amiss, but the auroral one. As he himself once stated: "Plasma instabilities seen from earth in the night sky are auroras by definition." But while auroras can be defined as plasma instabilities, not all plasmatic emanations are inherently auroral.

¹ Ibid.

² Ibid.

³ I. Wolfe, "Meeting of the California Society for Interdisciplinary, January 24-26, 1986, at Mountain Centre, California," *KATAKLYSMOS* (misprinted as *KATAKLYMOS*), III: 3 & 4 (April 1986), pp. 14-15.

⁴ I. Velikovsky, Worlds in Collision (N. Y., 1952), p. 387.

⁵ I. Wolfe, loc. cit.

⁶ *Ibid*. (emphasis added).

⁷ "Cluster Observes Jet Braking and Plasma Heating," spacedaily.com/reports (July 5, 2011).

⁸ Ibid.

⁹ M. A. van der Sluijs, op. cit., p. 31.

¹⁰ Idem (writing under the name Rens van der Sluijs), "Ancient traditions: What Can They tell Us About the History of the Earth?" Chronology & Catastrophism Review (2008), p. 64.

Chapter 5 Blowup

COSMIC INCURSIONS

That the Sun could have captured a wayward planet sometime in the past is hardly the notorious idea it was envisioned to be when the iconoclastic Ralph Juergens proposed it back in 1977. Moving from one extreme to the opposite other, it is now believed that there are billions of stars in our galaxy alone that have captured planets that once roamed through interstellar space.² According to the astrophysicist Hagai Perets: "Stars trade planets just like baseball teams trade players." Despite all that, Perets remains steadfast in his opinion that there is "no evidence" that our Sun has ever captured such a planet.⁴

Apart from disclosures by ancient cultures, the idea that Earth had originally belonged to a different sun goes back to the eighteenth century as proposed by Benoit de Maillet (1656-1738) whose work, Telliamed, was published some ten years posthumously. Although he was mistaken on most of the original concepts he presented in that work, de Maillet was not entirely wrong in his views about Earth's original sun. Drawing on ancient, as well as Biblical, tradition, he came to the conclusion that Earth had originally revolved around a star much smaller than the present Sun. It was, according to him, only later, at the time of the Noachian deluge, that Earth "left its original sun" to enter the present Solar System.5

Very much as in Juergens' case many years later, few were those who were inclined to take de Maillet's proposals seriously, especially since his disclosures were based on the mytho-historical record. But while such practices were also once derided, there are now quite a few conventional scientists who have been taking the mytho-historical record into consideration in their studies, even if not always used correctly.⁶

What NASA has, in the meantime, been discovering is flinging past theories of the Solar System's formation into chaos. While the Administration's Genesis Spacecraft discovered

¹ R. E. Juergens, "The Critics and Stellar Energy," SIS Review II:2 (December 1977), p. 49.

² "Some Stars Capture Rogue Planets," spacedaily.com (April 20, 2012).

³ Ibid.

⁴ Ibid.

⁵ S. S. Genuth, Comets, Popular Culture, and the Birth of Modern Cosmology (Princeton, New Jersey, 1997), p. 202.

⁶ See, for instance, B. Kent, "Was Chicken Little Right?" Los Alamos Newsletter (December 6, 2004), p. 8; E. W. Barber & P. T. Barber, When They Severed Earth from Sky: How the Human Mind Shapes Myth (Princeton University Press, 2005); A. A. Baird, "Sifting Myths for truths About Our World," Science (May 27, 2005), pp. 1261-1262; K. Krajick, "Tracking Myth to Geological reality," Science (November 4, 2005), pp. 762-764; R. McKie, "Ancient Legends Give an Early Warning of Modern Disasters," The Observer (December 4, 2005); B. Rappenglück, et al., "The Fall of Phaethon: A Greco-Roman Geomyth Preserves the Memory of a Meteorite Impact in Bacaria (South-East Germany), Antiquity, Vol. 84, No. 324 (2010), pp. 428-439.



Benoit de Maillet

that the System's inner planets, including Earth, do not contain the same ratios of oxygen and nitrogen as the Sun,¹ the Interstellar Boundary Explorer—IBEX for short—found that the gases contained within the entire Solar System are different from those outside its boundaries.²

David McComas is of the opinion that what IBEX brought to light could mean that the Solar System, including Earth, came into being in a different part of the galaxy than the one in which it is presently located.³ These findings supported the inferences derived from the composition of the Allende meteorite that landed in the state of Chihuahua, Mexico, in 1969. The calcium-aluminum-rich inclusions that this meteorite contains are held to be the oldest substances in the Solar System that could only have formed far away from where the Sun presently sits.⁴

On the other hand, Kevin McKeegan is quite confident that what the information acquired by the Genesis Spacecraft implies is that Earth did not form out of the same nebulous material that created the Sun."⁵

Bernard Marty, co-investigator of the Genesis discoveries, is of the same opinion. What the Genesis findings indicate, as far as he is concerned, is that "all solar system objects including the terrestrial planets, meteorites and comets are anomalous" when "compared to the initial composition of the nebula from which the solar system formed."

Perets notwithstanding, what the above boils down to is that, while the Sun seems to have shifted its location within the Milky Way galaxy, some of its members, including Earth, had to have been captured into its chaotic family even later.

The Sagittarius dwarf galaxy, which is known to be presently slicing right through our Milky Way, continued to acquire notoriety while this book was being written. It is now no longer thought that the interaction of these two galaxies is the result of a single merger. Sagittarius, it is now believed, "has careened twice through our much larger home galaxy...and is lined up to do it again." But, while noting that the smaller galaxy is "being ripped apart," astrophysicists seem to be mostly concerned with the manner in which this so-called collision has affected, and continues to affect, the Milky Way's spiral arms. Despite the fact that the invading galaxy is slashing right through the very area occupied by our Solar System, which System is better aligned with the invader's ecliptic plane and axial orientation than with that of the Milky Way, our alien galactic origin continues to be denied.

¹ L. Kruesi, "Solar System Uncertainty," Astronomy (October 2011), p. 22.

² I. Thomson, "Solar System May Have Alien Origin," theregister.co.uk (January 31, 2012).

³ Ihid.

⁴ Lawrence Livermore National Laboratory, "Oldest Objects in Solar System Indicate a Turbulent Beginning," physorg.com/news (March 3, 2011).

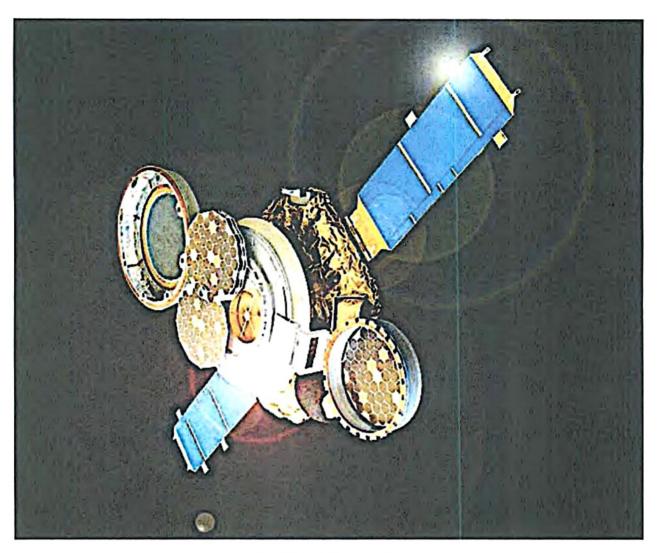
⁵ L. Kruesi, loc. cit.

⁶ D. Brown, "NASA Mission Suggests Sun and Planets Constructed Differently," *jpl.nasa.gov/news* (June 23, 2011).

⁷ UCI Irvine Today News Release, "Milky Way's Spiral Arms are the Product of an Intergalactic Collision Course," *uci.edu/news* (September 14, 2011, emphasis added).

⁸ *Ibid*.

⁹ *Ibid.*; C. W. Purcell, *et al.*, "The Sagittarius Impact as an Architect of Spirality and Outer Rings in the Milky Way," *Nature* (September 15, 2011), pp. 301-303.



The Genesis Spacecraft. (Image courtesy of NASA.)

PLASMASPHERIC CONTACT

The extent of the plasmaspheric bubble that encases the Solar System, known as the heliosphere, is not yet exactly known, and I am not about to befuddle the reader with estimates that will range in billions of miles and/or kilometers concerning a volume that might not even be unvarying. Voyager 1, one of NASA's most famous spacecrafts, was launched in 1977 in order to explore the vast expanse of this domain. Traveling close to 57,600 kilometers (38,000 miles) per hour, it had, by 2012, distanced itself by close to 18 billion kilometers (11 billion miles) from the Sun, becoming the farthest object man had yet shot into space. While it might be considered a frivolous cliché to state that these are mind-boggling distances and speeds, the statement still holds true; the mind simply is not capable of grasping the immensity of these statistics.

At the above mentioned distance from the Sun, Voyager 1 entered what has been termed



Voyager 1 (Image courtesy of NASA.)

"a stagnation region...a kind of cosmic purgatory," where charged particles from the Sun seem to be lessened. Those streaming in from interstellar space, however, continue to make it through. More than that, to everyone's surprise, "a doubling in the intensity of the magnetic field" was actually detected, including "a 100-fold increase in the intensity of high energy electrons."

It was through this highly energetic space that the proto-Saturnian system would have plowed on its inevitable journey from outside the Solar System toward the Sun. The catastrophic events that this incursion instigated both on Earth and its primeval host—described in detail in previous volumes⁵—were triggered when the boundary of the proto-Saturnian system's plasmaspheric envelope came into violent contact with the solar one. As transpires when the plasmaspheres of such different bodies contact each other, an intense electric discharge flew between them to the detriment of proto-Saturn whose electric potential energy was much lower than the Sun's. In keeping with the nature of brown dwarf stars, of which it was a minor member, proto-Saturn flared up in a blinding radiance that man was never to forget.

¹ NASA Jet Propulsion Laboratory News & Features, "NASA's Voyager Hits New Region at Solar System Edge," *jpl.nasa.gov/news* (December 5, 2011).

² Ibid.

³ Ibid.

⁴ Ibid.; K. Sawyer, "Voyager 1 Nears Edge of Solar System," Washington Post (November 6, 2003), p. A03.

⁵ D. Cardona, Flare Star (Victoria, British Columbia, 2007), pp. 255 ff.; idem, Metamorphic Star (Oregon 2011), pp. 120 ff.

DATING CREATION

That proto-Saturn's flare-up was seen by ancient man as the supreme act that ushered in Creation, the mytho-historical record leaves no doubt. This event is not only recorded in the very first chapter of the Old Testament, it remained throughout time a steadfast principle of Rabbinic belief. Not only did it form "the starting point" of pharaonic Egypt's entire "mythological speculations," it embedded itself in the religious dogmas of all ancient nations as it continues to be accentuated in modern ones as well.

The oral traditions of ancient societies continued to retain their reliability mainly because of the sanctity that became attached to them. It is, however, not that easily explained what sanctity, sacredness, piety, devoutness, or even godliness, really meant to ancient man. But if there ever was a general prohibition—the strictest taboo—by all humanity against anything, it would definitely have to be the one that rose against altering anything that was believed to have been accomplished by whatever omnipotent deity that seers, prophets, priests, or shamans managed to instill on the members of their particular culture. Not having lived during those times—not having witnessed and been prone to the events that then transpired, to say nothing of the terrible calamities that these events involved—we shall never be able to fully comprehend the effect that all of this ended up having on humanity.

As noted above, ancient societies were not the only ones who continued to hold on to the dogma concerning the shedding of the primordial light. With but few exceptions through the ages, modern man did not turn out much different. Even when science managed to grip a tight hold on certain modern individuals, the shedding of light prior to what by then had been misconstrued as God's creation of the Universe continued to be believed in. By then, however, among other matters, Biblical fundamentalists found themselves wondering exactly when it could have been that this light had been shed.

It has to be admitted that the main authorities who felt impelled to nail down this date were members of the clergy, such as Theophilus, Bishop of Antioch (AD 115-181); Eusebius Pamphili, Bishop of Caesarea, Palestine (AD 263-339); the Christian priest Eusebius Hieronymous, better known as Jerome (AD 347-420); Aurelius Augustinus, Bishop of Hippo Regius, in present-day Algeria (AD 354-430); the English monk known as the Venerable Bede (AD 672-735); Georgius Syncellus, the episcopal vicar to the Patriarch of Constantinople (late AD 700s-810); and various others, even though there were some, like Sextus Julius Africanus (AD 200-245), who were not members of the Christian ministry.

Commencing their chronicles with what they all believed to have been God's creation of

¹ See, here, for instance, D. Teresi, Lost Discoveries: The Ancient Roots of Modern Science—From the Babylonians to the Maya (N. Y., 2002), p. 219; D. Cardona, Flare Star (Victoria, British Columbia, 2007), pp. 290 ff., where various sources are cited.

² Genesis I:3-4.

³ L. Ginzberg, *The Legends of the Jews*, Vol. V (Philadelphia, 1968), p. 112.

⁴ E. A. W. Budge, The Egyptian Book of the Dead (N. Y., 1895/1967), p. xcix.

⁵ D. Teresi, *loc. cit.*; D. Cardona, *Flare Star* (Victoria, British Columbia, 2007), pp. 290 ff., where various sources are cited.

the world, these early writers, as well as others, utilized the genealogies supplied in the Old Testament in order to work back to Elohim's shedding of the light. The date that each came up with varied from those reached by the others, but, since they were all using the same system, understandably enough, most of them were within reasonable accord with one another. The dates that were attained by these early chroniclers ranged mainly between 4000 and 5500 B.C., with some going a little over and others a little under either way.

None of this should be wondered at since what the Bible offered was accepted quite literally up until medieval times. Among the Jews, however, religious opinion took a different turn. For one thing, by the ninth century, the Jewish rabbinate had latched on to 3760 B. C. as God's Year One, which was accepted thereafter among most orthodox Jews. But, more than that, Biblical interpretation came under stricter scrutiny by the Jewish rabbi and astute philosopher, Moshe ben Maimon, popularly known as Maimonides (1134-1204), who is still recognized by Orthodox Jews as the "leading authority" on Judaic law.

In one of his monumental treatises, ben Maimon devoted an entire chapter to what some would see as contradictions between the *Torah*—the five books of the Old Testament said to have been written by Moses—and what was then becoming known to have transpired in the past.²

One thing that ben Maimon became adamant about is that "whenever the biblical text contradicts well-established knowledge, one should set aside the literal meaning of the text and interpret the biblical words metaphorically." In keeping with the trend we have been following, ben Maimon actually stressed that if newly acquired knowledge was to contradict the Biblical story of Creation, "one should not hesitate" to interpret the entire first chapter of Genesis figuratively, since the series of events it there describes could not really have taken place.⁴

Eventually, Christianity fell afoul of itself and broke into separate sects that ended up at each other's sacred throat. Joseph Justus Scaliger (1540-1609), born in Holland, but of Italian descent, was a Protestant scholar of high standing who thought nothing of taking the powerful Catholic Jesuits to task. In the end the Jesuits won—not because they managed to fault Scaliger's work, but because they succeeded in ruining his pride by defaming his paternal lineage. Even so, despite his criticism of Catholic dogma, Scaliger was still reliant on Biblical genealogy and came up with 3950 B.C. for the first day of Creation.⁵

Not all Jesuits, however, were against Scaliger. In fact, one highly-esteemed scholar who championed and improved on Scaliger's work, oddly enough, was the French Denis Pétau (1583-1652), also known as Dionysius Petavius, who was not only a Jesuit priest but ended up a Cardinal. He, too, utilized Biblical genealogy for his calculations and thus came up with 3984 B. C. as the year of God's Creation, which was not that far off from Scaliger's date.⁶

¹ S. W. Carey, Theories of the Earth and Universe (Stanford, California, 1989), p. 70.

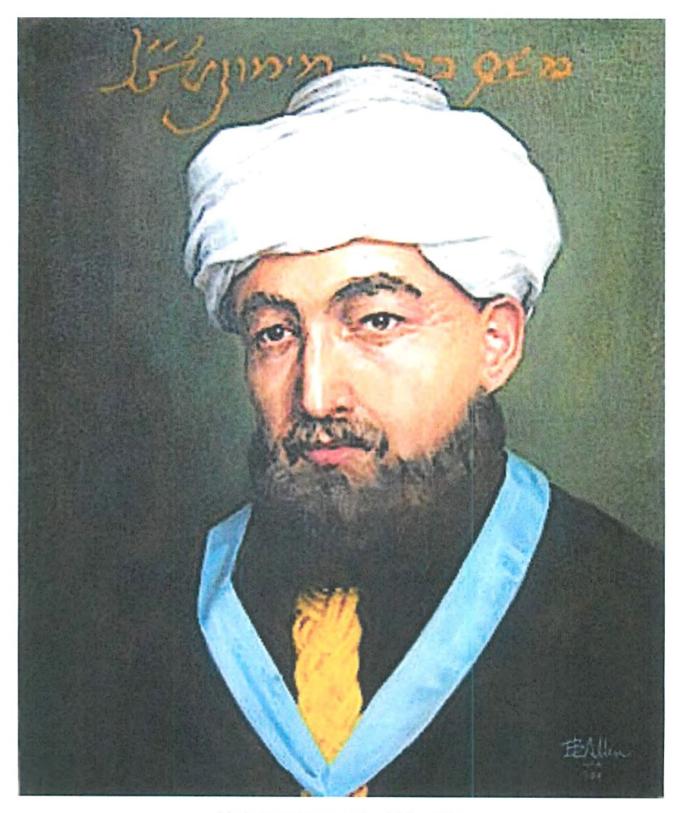
² Maimonides, Guide for the Perplexed, II:25.

³ N. Aviezer, "Jews for Darwin: Evolution, Intelligent Design, and Orthodox Judaism," *Skeptic*, Vol. 13, No. 1 (2007), p. 11 (emphasis as given).

⁴ Ibid.

⁵ J. Bernays, Joseph Justus Scaliger (Leipzig, 1855), in toto.

⁶ J. de Ghellinck, "Denis Pétau," The Catholic Encyclopedia, Vol. 11 (1911).



Moshe ben Maimon—a.k.a. Maimonides

FUNDAMENTAL STRONGHOLDS

If there is one person that sticks out in this respect, one that has gained the most notoriety through the years, it has to be James Ussher (1581-1656), Archbishop of Armagh in Ireland. Having based his calculations on the same Biblical genealogies that most previous chronologists had utilized, he came to the conclusion that God created the world on October 23 or 26—reports and translations vary¹—in 4004 B.C. John Lightfoot, vice-chancellor of Trinity College, refined that date further by proclaiming that God's Creation transpired exactly at nine o'clock in the morning.² As far as religionists were concerned, especially in Great Britain, that was it. It was as if God himself had spoken. Ussher's date for the creation of the world was not only incorporated in the marginal explications of most English Bibles, it became part and parcel of God's own proclamations,³ remaining sacrosanct even among major men of science including Isaac Newton (1642-1727).⁴

As time went on, however, geologists began to shift the age of Earth from one extreme to the opposite other. And—once again oddly enough—the fundamental law of stratigraphical geology on which Earth's age began to be re-calculated was originally articulated, not long after Ussher's proclamation, by a Roman Catholic bishop named Nicholas Steno in 1669.⁵ These studies received further impetus from Georges-Louis Leclerc, Comte de Buffon (1707-1788), as well as James Hutton (1726-1797), before they led to the unfortunate doctrine of uniformitarianism by Charles Lyell (1797-1875).

Starting around the mid-nineteenth century, Christian doubts concerning the validity of Old Testament declarations began to metamorphose into a new-fangled form of faith. Scientific discoveries had by then started to call various of these supposed verities severely into question. This was particularly true when it came to Creation as portrayed in *Genesis*. In a way, Christian philosophy began to mimic ben Maimon's earlier disclosure. To quote James Adovasio:

"...the problem had arisen that the world was much older than Genesis seemed to say it was. Genesis now had to be regarded as a poetic way of saying that God had spent up to six separate ages, including the Pleistocene, preparing the planet for his supreme creation..."

But even then, God's "supreme creation," that is mankind, was still believed to have taken place around 4000 B. C.⁷

Even so, although these sentiments cannot be said to have become universal among Christians, such changes in Biblical expositions continued to surface through the twentieth, and into the twenty-first, century. Note, for instance, what a United Methodist pastor had to

¹ B. Bryson, A Short History of Nearly Everything (Canada, 2004), pp. 74-75.

² J. Ussher, Annales Veteris Testamenti (London, 1650).

³ A. D. White, A History of the Warfare of Science With Theology in Christendom (London, 1896), p. 253.

⁴ L. C. Stecchini, "Newton and Historical Science," KRONOS X: 1 (Fall 1984), p. 63.

⁵ E. Zangger, *The Future of the Past* (London, 2001), p. 16.

⁶ J. M. Adovasio, (with Jake Page), The First Americans (N. Y., 2002), p. 83.

⁷ Ibid.



James Ussher—Archbishop of Armagh (Portrait by Peter Lely.)

offer at the end of 2010:

"Narrow Biblical literalism also strips the Holy Scriptures of their richness of meaning and reduces them to pseudo-science textbooks and dubious historical accounts. Myth and story are powerful means of transmitting truth without being literal events or descriptions of real persons."

Although this applied mainly to Protestant Christian sects, there came a time when Catholics, too, embraced a similar philosophy, if only to a much lesser extent.²

In the meantime, while not necessarily accepting Ussher's particular date, Biblically-inclined scientists continued to opt for a young Earth. Take, for instance, Robert Gentry, the nuclear physicist who has become renowned for his studies of radioactive halos. Also known as pleochroic halos, these constitute the microscopic spherical shells of discoloration within ancient minerals that mark the spots of radiation damage caused by the inclusion of minute radioactive crystals. Fair enough, we need not go into all that, but Gentry, who is a Seventh-day Adventist and an avowed Creationist, has used his researches to "prove" the young age of all existence. As paraphrased by David Salkeld:

"Dr. Gentry's doctrine has the merit of simplicity but is equally unsatisfying. He maintains that our galaxy and solar system, Earth and its 'Genesis rocks,' were all formed by supernatural creation about 6,000 years ago..."

A recent defender of James Ussher is Nicholas Sykes, the recently ordained bishop of the Anglican Church, who has had a brilliant career teaching science and mathematics in the Cayman Islands, Jamaica, and Great Britain. Having become convinced of the validity underlining the hypotheses proposed by the proponents of the electric nature of the Universe, he has been using their proclamations as a platform from which to launch a series of scientific editorials that, in their totality, are utilized to heighten Biblical belief.

Latching on to the dates "5000 to 1000 years ago," the second of which is an obvious misprint that should have read "10,000," he presented them as "the setting" for Earth's "geological clocks," in support of which he offered the following excerpt from one of Stephen Smith's shorter disclosures.

"If Electric Universe concepts are found to be more reasonable than previous theories, that cataclysmic events completely overturned the familiar environment that older peoples experienced, then we have no 'clocks' and no 'calendars' to use, except those that came into being a mere 100 generations ago."

¹ M. Toepke-Floyd, "Myth Can Transmit Truth," Biblical Archaeology Review (November/December 2010), p. 69.

² See, for instance, M. Mason, "Holy Alliance," Discover (September 2008), pp. 45-46.

³ R. V. Gentry, Creation's Tiny Mystery (Knoxville, Tennessee, 1992), in toto.

⁴ D. Salkeld, "Scientific Dating Problems—The Radiometric Dating of Earth's Rocks," *Chronology & Catastrophism Review* (2003), p. 23.

⁵ N. J. G. Sykes, "The Paradigm of the Electric Universe," *Proceedings of the Natural Philosophy Alliance*, Vol. 8 (July 2011), pp. 609-610.

⁶ S. Smith, "Earth Cycles," thunderbolts.info/tpod (March 15, 2010).

From the above and similar expositions, Sykes reached the conclusion, which he injudiciously imposed on the electric universe proponents, that whether Earth—or, at least, "the humanly inhabited Earth"—is only about as old as the above dates is presently unknowable. Using the initials EU to stand for the Electric Universe Theory, he then adds that: "To point out that the date of Creation arrived at by Archbishop James Ussher—some 6000 years before the present—roughly corresponds with the EU's clock-setting is likely to produce knee-jerk reactions among the cognoscenti to the effect that EU Theory is just another form of young-earth creationist fundamentalism."

First and foremost, however, let us get one thing straight: Not all those who have accepted the tenets of the Electric Universe Theory have also accepted the dates in question, let alone the possibility of a young Earth. And secondly, yes, Sykes' proclamation is *more* than likely to produce much worse than "knee-jerk reactions" not only among "cognoscenti" in general, but even among some of the very adherents to the Electric Universe Theory that he seeks to champion.

That Sykes holds Ussher in great admiration is evidenced by what else he had to say of him, as in the following:

"Archbishop James Ussher was, as Stephen Jay Gould pointed out, one of the very fine scholars of his time, and deserves great respect from the thoughtful. That being the case, the rough coincidence of dates should give us pause for further thought. Rabid mockery destroys only the mockers. Sir Isaac Newton also came up with similar dates for creation. Is he to be mocked as well?"

The problem, however, has nothing to do with mockery but with the validity or otherwise of a given concept. And no, I am not making too much of this. On the contrary, it is intimidating to come across the continuous filtering of news concerning the indoctrination of Biblical fundamentalism by those in tutorial positions in modern educational institutions. One such is Alvin Plantinga, "probably the most eminent member of the guild of Christian philosophers," who has openly pronounced that "Scripture is inerrant: the Lord makes no mistakes; what he proposes for our belief is what we ought to believe."

It should not, therefore, come as any wonder that a Creation Museum, complete with its own planetarium, costing up to twenty-seven million dollars, was actually built, furnished with dramatic dioramas, and opened to the public amid "great media fanfare" in Petersburg, Kentucky, in May of 2007. It might not have been all that bad had the museum restricted its exotic displays to Biblical events, even to the extent of claiming that *all* of them actually took place exactly as narrated. But, not being satisfied with that, the Creationist connoisseurs

¹ N. J. G. Sykes, op. cit., p. 610.

² Ibid.

³ Ibid.

⁴ R. S. Hendel, "Critical Biblical Scholarship—What's the Use?" *Biblical Archaeology Review* (July/August 2012), p. 22.

⁵ A. Plantinga, "When Faith and Reason Clash," in R. T. Pennock (Ed.), Intelligent Design Creationism and its Critics: Philosophical, Theological, and Scientific Perspectives (Boston, 2001), p. 119.

⁶ L. Krauss, "Museum of Misinformation," New Scientist (May 26-June 1, 2007), p. 24.

behind the project went to great pains in order to distort all that it contains in order to make it appear "scientific." As Lawrence Krauss from the Case Western Reserve University in Cleveland, Ohio, declared:

"The Creation Museum is designed to suggest that science demonstrates the viability of a literal interpretation of *Genesis*. It argues that scientific evidence supports a six-day creation of the Earth, a 6000-year-old universe, and a world where dinosaurs and humans happily roamed together."²

What might not be well known to scientific-minded persons is that the Kentucky Creation Museum is only one of many that can be found throughout the world. Museums devoted to the literacy of the Old Testament exist in cities, towns, and villages, scattered over fourteen separate American states; in Alberta, Canada; Portsmouth, Lancashire, and Bristol in England; Germany; Turkey; and even in Hong Kong. So if the readers of this work think that Creationist institutions have become a rarity through the years, they can think again.

THE LONG COUNT

Judeo-Christians have not been the only ones through history to have dated the creation of the world. As is well known, the Maya developed more than one calendric system, one of which, now known as the Long Count, or the Long Calendar, utilized a time-span of 18 months of 20 days each, making for a year of 360 days plus an extra five that were considered ill-omened. Twenty such years constituted what they termed a *katun*, with twenty of these establishing a *baktun*. From that they developed a Great Cycle that consisted of thirteen *baktuns* that had their start at the creation of the world in what works out to have been August 11,3114 B.C.³

A misunderstanding of this particular calendar, incidentally, is what gave rise to the belief the world will end in December 2012.⁴

BIBLICAL GENEALOGIES

I shall not claim originality, but the two dates that Sykes latched on to—10,000 and 5,000 years ago— have been given prominence in most of my works. I must, however, stress that in none of my writings have I ever expressed the belief that Earth, or even "the humanly inhabited Earth," is only that old. To be fair, neither does Sykes himself, since he actually stresses that Creation is "unable to be pinned down in time by the computations of scholars like Ussher and Newton or their more modern counterparts." All of which makes one wonder why he champions the dates arrived by these scholars on the very same page.

My interest in the first of these two figures concerns the shedding of the proto-Saturnian light. And, to be sure, the exact time concerning this event cannot be determined through the calculation of Biblical genealogies as most past chronologists have attempted.

¹ Ibid.

 $^{^2}$ Ibid.

³ "Tikal: Death in Life, Life in Death," Archaeology Odyssey (January/February 2006), pp. 54-55.

⁴ Ibid.

⁵ N. J. G. Sykes, loc. cit.

The ages allotted to the early Biblical individuals from Adam to Abraham are given in hundreds of years each.¹ The longest-lived among them was Methuselah who is said to have reached the ripe old age of nine hundred and sixty-nine years.² That these long lives are mythical is self-evident except to the most ardent of Biblical fundamentalists.

There are then those who claim that the length of the year was much shorter during that particular era. Not knowing the exact length of the year during the time in question would, however, make the utilization of Biblical genealogy in order to pin-point the time of God's Creation an impossibility.

What is even worse is that the passage of time could not be calculated by anyone living on Earth during the period with which we are concerned. Since Earth was not in orbit around proto-Saturn, but lay suspended beneath its primary while sharing its rotational axis, the year was nonexistent. A day-night demarcation would also have been absent under those conditions. And since proto-Saturn itself had not yet begun to display its latitudinal atmospheric bands, it could not have been seen by ancient man to be rotating. Ancient man could not therefore have kept count of its gyrations. The only item in the sky that exhibited distinct markings was proto-Saturn's circumstellar disk, but its vaporous constituents would have been too chaotic in their constant convoluted transformations to be utilized as time markers.

Given all that, there was no way by which to tell how long individuals could have lived, let alone keep track of their lineage. Worst of all, despite their reported multitudinous begetting, all Biblical characters from Adam to Abraham's father are mythical entities who never really trod on Earth.

RADIOCARBON DATING

Even were we to cast the proto-Saturnian system aside, Biblical chronology remains so chaotic that different dates are actually accepted by different proponents for some of the same events. This comes about through the use of carbon-14 dating which has given different ages for certain archaeological artefacts each of which is accepted by those whose chronology it happens to support. As reported by Yosef Garfinkel:

"In the early days of attempting to support or refute the Low Chronology, various problems in carbon-14 dating were exposed and corrected, and the advocates of the Low Chronology declared without hesitation that the dating results of hundreds of samples clearly supported the Low Chronology. Conversely, the same dates were also presented as supporting the traditional high chronology. It is indeed quite bizarre to see the same corpus of radiometric dates used to support both chronologies."

Is our date of 10,000 years ago for the shedding of the light that heralded Creation based on anything better? In actuality, it is not since it, too, is primarily grounded on prehistoric events that have been dated through the radiocarbon-14 method. Even though newer

¹ Genesis 5: 1-32.

² Ibid. 5: 27.

³ Y. Garfinkel, "The Birth & Death of Biblical Minimalism," Biblical Archeology Review (May/June 2011), p.50.

techniques have attempted to overthrow it,¹ and despite its many deficits, this particular system still remains the best we have at our disposal. As I have often done before, I must, however, stress that, at best, this date remains a benchmark figure that relies on similar yardsticks in relation to Earth's geological, glaciological, and paleontological cataclysmic transformations during its transition from the end of the Pleistocene epoch into the Holocene. Nevertheless, as we shall see, this date keeps cropping up.

¹ See, for instance, G. K. Kahn & S. M. Pompea, "Nautiloid Growth Rhythms and Dynamical Evolution of the Earth-Moon System," *Nature* (October 19, 1978), pp. 606 ff.; D. Garner, "The Last 3 Million Years at a Snail's Pace: A Tiny Trapdoor Opens a New Way to Date the Past," *york.ac.uk/news-and-events/news/2011* (August 4, 2011).

Chapter 6

Meteorological Intensity

AXIAL WITHDRAWAL

s noted in a previous volume of this series, the first dramatic transformation that proto-Saturn's flare-up caused was the sudden retraction of its visible axial flux tube, the sustained Birkeland current that connected it to Earth. In fact, it is quite possible that this retraction was the actual impetus behind the flare since its withdrawal would have been the direct result of the electric discharge that was generated when proto-Saturn's plasmasphere came into sudden contact with the Solar System's heliospheric boundary. What transpired can be considered to have been a colossal short circuit that created an electric spark of cosmic proportions. There were many other cataclysmic changes that beset Earth's primordial sun, but the abrupt withdrawal of its axial column seems to have engendered all the ones that followed.

ATMOSPHERIC DIFFUSION

One of the incidents that immediately resulted down on Earth due to the tremendous blast generated by proto-Saturn's axially directed flare was the partial dispersion of what was left of Earth's primordial atmosphere.² This dispersion would not even have been noticed by the survivors of the incident since, if nothing else, temporarily or otherwise, the flare would have come close to blinding most of them. But even had this not been the case, the partial dispersion, and thus thinning, of the atmosphere would not itself have been all that obvious since most of it would have already been blown away by previous flares.³ What this implies, of course, as quite a few investigators have proposed, is that, originally, Earth's atmosphere was much denser than it is at present,⁴ concerning which Frederic Jueneman coined the term *Pleiongaea*—meaning "More Earth."⁵

¹ D. Cardona, Flare Star (Victoria, British Columbia, 2007), pp. 279 ff. for a detailed discussion of this event.

² See idem, Metamorphic Star (Oregon, 2011), pp. 123-125 for more on this.

³ Idem, Primordial Star (Victoria, British Columbia, 2009), pp. 82 ff.

⁴T. Owen, "The Origins and Early Histories of Planetary Atmospheres," Bulletin of the American Physical Society (July-August 1981), p. 801; D. Norman, Dinosaur! (N. Y., 1991), pp. 74, 218; I. C. Johnson, "Long Term Violation of Uniformitarianism Demonstrated by Fossil Discoveries in Polar regions," Chronology & Catastrophism Workshop (1991:2), p. 21; R. W. Wescott, "Puzzles of Prehistory," The Velikovskian I:3 (1993), pp. 20-21; R. B. Driscoll, "Magnetic Models of the Polar Configuration," AEON IV:2 (August 1995), p. 22; S. Menon, "Insects of the Oxygeniferous," Discover (September 1995), pp. 30-35; T. Dickinson, "The Seeds of Life," Equinox (July 1997), p. 74; R. Dudley, "Atmospheric Oxygen, Giant Paleozoic Insects and the Evolution of Aerial Locomotor Performance," The Journal of Experimental Biology (April 15, 1998), pp. 1043-1050.

⁵ F. B. Jueneman, "Pleiongaea: A Myth For All Seasons," *AEON* II:3 (January 1991), pp. 21 ff.; *idem*, "Pterodactyles in the Mesozoic: A Flap in Time," *AEON* V:2 (April 1998), pp. 21-22.

Newer investigations along these lines have indicated that "oxygen and carbon dioxide concentrations have changed dramatically" during past periods when Earth was burdened by a "hyperdense atmosphere," which assessments have been substantiated by additional studies conducted by Robert Berner and Robert Sloan. Prehistoric oxygen levels that have been determined through analyses of air bubbles trapped in fossilized tree amber has indicated that Earth's atmosphere was much more oxygen-rich up to 10,000 years ago, the very date of our benchmark figure for proto-Saturn's flare-up. Analyses of similar amber from the much earlier time of the dinosaurs has further indicated that oxygen levels in the terrestrial atmosphere during that era were even more substantial.

Those involved in the above study have blamed the decline in oxygen from Earth's primordial past down into present times on human activities through the burning of fossil fuels that increased with the advent of the industrial revolution. But while there is no doubt that such usages have had their effect on regional environments, it remains doubtful that they would have drastically altered Earth's entire atmospheric oxygen content. Besides which—and this should have been taken into consideration by those responsible for such fearmongering—how could human activities have lessened Earth's atmospheric oxygen from the time of the dinosaurs down to the lower levels of 10,000 years ago?

ACCUMULATED HEAT

One of the questions that the above has raised has to do with the manner in which such a denser envelope would have affected the inception of life on Earth, to which we shall come to in a while. Jueneman has also raised the question whether it was Earth's denser atmospheric cover, rather than proto-Saturn's reflective plasmasphere or, for that matter, Thornhill's anode glow, that was responsible for Earth's primeval higher temperature. Such a denser burden, he has rightly pointed out, would have permitted the accumulation of additional moisture in the air, making for a heavier cloud cover. Air and water circulation would then have warmed the entire planetary surface, although, due to proto-Saturn's more direct thermal source, Earth's northern hemisphere would have benefitted somewhat more than its southern one.⁵

Jueneman's proposal, or one that comes extremely close to it, had already been presented years before by Robert Dudley. Oxygen and nitrogen partial pressures in Earth's past denser atmosphere, according to Dudley, would have substantially varied "such physical features as air density, viscosity, diffusivity" as well as "heat conductivity."

A decade later, Dudley's theory was resurrected by Colin Goldblatt and his associates. The nitrogen pressure in a denser atmosphere that this theory continued to propose was now held responsible for having kept primordial Earth from freezing over despite the dimmer

¹ R. Dudley, op. cit., pp. 1043-1044.

² P. Tatchell, "The Oxygen Crisis," guardian.co.uk (August 13, 2008).

³ Ibid.

⁴ Ibid.

⁵ F. B. Jueneman to D. Cardona, series of private e-mail communications (June, 2011).

⁶ R. Dudley, op. cit., p. 1044.

radiation from what was believed to have been our present, but still nascent, Sun. More specifically, Earth's primordial warmth was construed to have resulted from a worldwide greenhouse condition that was caused by the broadening of this very nitrogen pressure.

As we have already seen, runaway greenhouse theories of this nature had already been proposed by Carl Sagan, as well as others, to account for Earth's primordial warmth, and just as often brushed away for lack of evidence.³

A near-identical theory was also forwarded by the same Sagan to account for the much more excessive heat of the planet Venus. Unlike the similar theories that had been proposed for Earth, the one for Venus managed to capture wider attention and continues to be reiterated by most planetary scientists.

ENVIRONMENTAL COMPLICATIONS

In keeping with his proposal that it was the denser atmosphere under discussion, rather than the proto-Saturnian reflective plasmasphere, that was responsible for Earth's primordial heat, Jueneman stated that even light would have been radiated to both terrestrial hemispheres through atmospheric diffusion within such a heavier canopy. That, however, does not square well when compared with what is known to be presently transpiring on the planet Venus.

Venus has a much denser atmosphere than Earth presently holds on to. Despite the fact it is much closer to the Sun, the light that manages to filter through its thick atmosphere down to the surface tends to produce an orange glow. Had Earth's primordial atmospheric density been on a par with that of present-day Venus, proto-Saturn's much feebler glow, even at a closer distance, would have been dimmer than that. Had Earth's atmospheric burden been much denser than that of Venus, as Jueneman had surmised,⁵ not much light, if any, would have filtered through. This is one of the reasons supplied by those who have questioned whether such atmospheric density would have hindered, if not disallowed, the inception of life on Earth. Even Jueneman has had reason to raise that question.⁶

In comparing present-day Venus with what primordial Earth might have been like, we must also consider our sister planet's temperature which, at around 896°F (480°C), is hot enough to melt lead. And, naturally enough, that, too, has been added to the list of complications that might have hindered the inception of life had a similar situation ensued on Earth during its past ages.

Nor is that all.

¹ C. Goldblatt, et al., "Nitrogen-Enhanced Greenhouse Warming on Early Earth," Nature Geoscience (December 2009), pp. 891-896.

² Ibid.

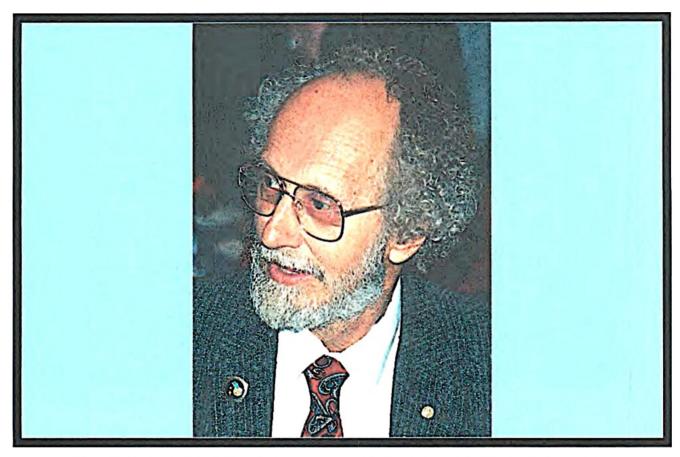
³ A. L. Gronstal, "Why Early Earth Did Not Freeze," space.com (September 4, 2008); K. Michaelian & O. Manuel, "Origin and Evolution of Life Constraints on the Solar Model," Journal of Modern Physics (June 2011), p. 590, in which further sources are cited; M. Schirner, "Our Sun May Have Been Bigger Long Ago," in the online Astrobiology Magazine (February 14, 2012).

⁴ F. B. Jueneman, loc. cit.

⁵ Idem, "Pleiongaea: A Myth For All Seasons," AEON II:3 (January 1991), p. 47.

⁶ *Ibid.*, p. 49.

⁷Too well known to require references.



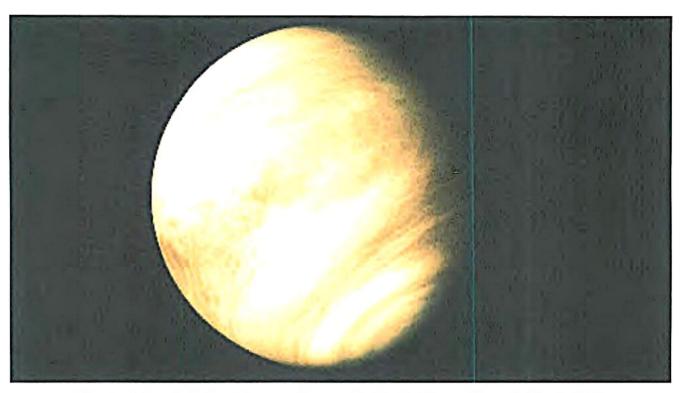
Frederic Jueneman, one of the proponents for Earth's heavier atmospheric burden in ages past. (Photograph—1995—by the author.)

Just as important in assessing the conditions associated with atmospheric density is the immense pressure such burdens impose on the surface of cosmic bodies. The pressure that the atmosphere of Venus inflicts on its surface is 92 times that of Earth, which is equivalent to being 910 meters—2,985 feet—below the surface of one of Earth's encircling oceans.

As is well known, the first attempts to land on Venus were conducted by the Soviet Russians through their Venera series of spacecrafts, the first of which was launched on February 12, 1961. The landers that managed to parachute safely from some of those spacecrafts down onto the Venusian surface only lasted from 23 minutes to about 2 hours before collapsing out of service. And this, too, has been added to the list.

LIFE IN EXTREME ENVIRONMENTS

At this point it might do well to keep in mind that certain life-forms here on Earth are known to thrive in some of the most outlandish conditions our planet has to offer. Referred to as extremophiles in relation to the extreme environments in which they live, some of these organisms have been found around hydrothermal vents at great ocean depths where light from the Sun fails to penetrate, where pressures are so intense they would crush the life out of creatures at sea level, and temperatures can reach high enough to boil blood had these



The cloud-shrouded planet Venus as photographed by the Pioneer Venus Orbiter in 1979. (Photograph courtesy of NASA.)

life-forms possessed any.1

Thermophiles, which means "heat-loving," is the additional term coined for extremophiles that thrive around such hydrothermal vents that curiously create havens for life despite the scorching heat that reaches up to 122° Fahrenheit (50° Centigrade).

Another group has gained the collective name of hyperthermophiles for being able to thrive at even higher temperatures reaching up to 248° Fahrenheit (120° Centigrade).²

In addition to all that, there is nothing down there that would be considered fit to eat, but what is poison to most life serves as food for extremophiles. What they subsist on are the very toxic chemicals spewed out by the very vents that serve as their hellish homes.³

Recorded on tape for posterity through a video camera that was lowered to the bottom of a deep trough half a mile below the frigid water off the coast of Antarctica are the images of a darkened bacterial colony that exists at that depth. Mingled with the bacteria one can see brilliant white clams, measuring up to a foot in length, huddling in the heated water around a series of smallish mud volcanoes, three feet in height. They all thrive on methane and other chemicals that are spewed by the vents or seep up through the sediments at the bottom.⁴

But never mind half a mile. Using a submersible constructed with a titanium hull that can withstand deep oceanic pressures, life has been discovered in hydrothermal vents off the

¹ L. Pullen, "Earth Hot Spots Spark Alien Ideas," space.com (September 18, 2008).

² Ibid.

³ Ibid

⁴ E. Kleeman, "Geologists Find Life in a Dark, Frigid trough," *Discover* (November 2005), p. 13.



Hydrothermal vent.
(Photograph courtesy of the Woods Hole Oceanographic Institute.)

Galapagos Islands at a depth of 2.5 kilometers, equivalent to 1.6 miles.1

"The crew was amazed to find a thriving ecosystem [at that sunless depth]. Three hundred species congregated near superheated water from 'black smoker' vents. The creatures ranged from bacteria and iridescent shrimp to giant clams and 6-foot-long (2 meters) red-tipped worms."²

It is not, however, just in ocean waters way below the surface that such organisms are to be found, but even deep beneath the bottom of some seas. A submersible sent by a team from the Oregon State University into the depths off the Oregon coast was able to extract water from a borehole 300 feet below the ocean floor. Despite the tremendous pressures and lack of oxygen, to say nothing about the complete absence of sunlight, the water still turned out to be

¹ C. Impey, "How Life Could Thrive in Hostile Worlds," Astronomy (December 2008), p. 57.

² *Ibid*. (emphasis added).

home to a community of single-celled microbes.1

But let us get away from oceans. Some extremophiles can actually live inside solid rock. Others have adjusted to more than one type of radical existence. Bacillus *infernus*, the "bacillus from hell," discovered in a deep-drilling project in Virginia, fits both the above categories since it actually thrives in rock several miles underground "where the pressure is hundreds of times greater than on Earth's surface." Besides that tremendous pressure, it can also withstand the great heat and acidity inherent within the solid rock that forms its claustrophobic home. So, similarly, with the extremophiles that have been discovered "five miles deep in the bowels of South African gold mines."

There is also Deinococcus radiodurans, wittily-nicknamed Conan the Bacterium, that can "tolerate radiation thousands of times more intense than a dose that would kill a human," as so, also, can certain tardigrades, popularly known as waterbears. In fact, never mind "tolerate." The South African extremophiles mentioned above have been claimed to be actually powered by the "radioactive decay of unstable atoms in the rocks."

Let no one brush the above aside by pointing out that the life being discussed is merely bacterial. As we have seen, some of this life includes clams a foot long and worms that are known to reach six feet in length. Besides which, not all miniscule life-forms consist of simple-celled bodies. Take, for instance, the above-mentioned tardigrades. Although no bigger than the dot at the end of this sentence, they are physically quite complex, possessing "five body segments, four pairs of clawed legs, a single gonad, a multilobed brain, digestive and nervous systems, and separate sexes." Researchers have so far "identified more than 750 distinct species" of these tardigrades. They have also realized that they occupy "a major branch in the tree of life."

Even so, despite their much simpler body forms, let us not brush microbes aside as of little importance in that same tree of life. As it has been emphasized by others, Earth is actually a microbial planet, with "the common ancestor of all life on Earth" having "probably" been "a heat-loving extremophile."

EVIDENTIAL SUPERFLUITIES

Some of the above involve environmental temperatures that are somewhat below that of the planet Venus, but most of them encompass much higher pressures. It should, therefore, be evident that life could have easily existed on an Earth that had been burdened with a much denser atmospheric envelope. It has, in fact, been theorized by space scientists that "a

¹ P. Basu, "For Microbes, Hell Isn't So Bad," Discover (April 2003), p. 11.

² C. Impey, op. cit., pp. 54, 58.

³ A. Frank, "Cosmic Abodes of Life," *Discover* (May 2009), p. 48 (emphasis added).

⁴ C. Impey, *loc. cit.* (emphasis added).

⁵ Ibid.

⁶ A. Frank, loc. cit.

⁷ C. Impey, op. cit., p. 58.

⁸ Ibid.

⁹ Ibid.

¹⁰ *Ibid.*, p. 54.

¹¹ Ibid., p. 56.

plausible scenario to build life" on a planet "consists of a dense atmosphere" in which "organic haze" can act as a catalyst for the formation of more complex organic compounds.

As for the excess heat involved in both the Venusian atmosphere and deep down in Earth's oceanic depths, it has been adequately conjectured that the tolerance of similar excessive heat is "a legacy" of the conditions that were required for the inception of terrestrial life.²

TITAN'S TEMPLATE

Titan, Saturn's largest satellite, which is larger than the planet Mercury, also harbors a dense atmosphere. Although not as dense as the one enshrouding the larger planet Venus, it is still much thicker than the one above our heads,³ definitely much thicker than had been predicted,⁴ applying a surface pressure that is equal to one and a half that of Earth's.⁵

Although Titan has been claimed to be "approximately four billion years old," the evident freshness of its surface features seems to belie its allotted age. With a visible network of rivers that seems to have caused "surprisingly little erosion," it is little wonder that the satellite has been described as "a complex moon with a perplexing geological past." As it has been stated, Titan's surface "should have eroded much more than what we're seeing, if the river networks have been active for a long time."

There have been those who have suggested that the reason for this may be due to a much slower process of erosion than the one that transpires here on Earth, while others have blamed the crispness of Titan's features on undefined phenomena that would have occurred more recently. "Simply judging by its surface features," some researchers have acceded, "Titan would appear to be much younger." 10

Even so, they still opted for an age between 100 or 200 million and 1 billion years, which, in my opinion, may still not be enough of a reduction in age to account for the crisp appearance of the satellite's surface features.

To an extent, the earlier suggestion by Linda Spilker who, at that time, was the deputy project scientist at the Jet Propulsion Laboratory in Pasadena, California, makes more sense. What she assumed is that Titan's surface has been periodically eroded and reformed, time and again, down through the ages. What that is telling us, she said, is that "Titan's surface is

¹ S. McCormack, "The Hazy History of Air on Saturn's Moon Titan." space.com (October 18, 2011).

² C. Impey, loc. cit.

³ A. MacRobert, "Titan's Surface: Mostly Ice, Not Goo," Sky & Telescope (August 2003), p. 22; A. Stone, "Life's a Beach on Saturn's Moon," Discover (August 2006), p. 16.

⁴ R. Naeye & D. Tytell, "Titan Revisited," Sky & Telescope (March 2006), p. 16; R. Hazen, "What is Life?" New Scientist (November 18-24, 2006), p. 51.

⁵ B. Rizk, "Saturn's Titan Reveals Earthlike Surprises," *Astronomy* (May 2006), p. 43; M. Carroll, "Earth of the Outer Solar System," *Astronomy* (November 2007), p. 36.

⁶ "Saturn's Moon Titan May Have Seen Earth-Like Erosion," space.com (July 23, 2012).

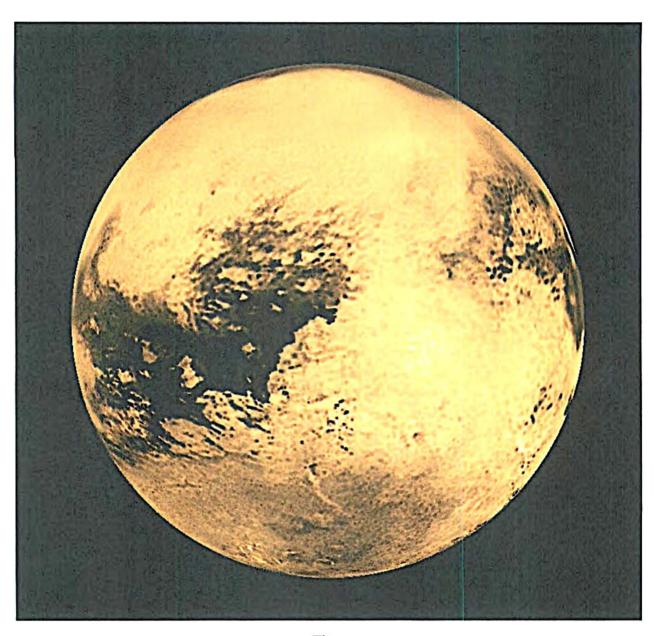
⁷ Ibid.

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Ibid.; R. Lorenz & C. Sotin, "The Moon That Would Be a Planet," Scientific American (March 2010), p. 42.



Titan (Photograph courtesy of NASA.)

young relative to the solar system," which theory was, in time, picked up by others.2

The incongruity concerning Titan's allotted age is further augmented when one takes its atmospheric envelope into consideration. With its gravitational attraction having been calculated to be about 1/7th that of Earth's, how could it have held to a denser atmosphere for

¹ J. N. Wilford, "On Saturn, a Spacecraft is Finding New Worlds," *The New York Times* (July 5, 2005), Science Section.

² See, for instance, S. K. Atreya, "The Mystery of Methane on Mars & Titan," *Scientific American May* 2007), p. 50; R. Lorenz & C. Sotin, op. cit., p. 43.

the millions of years it is said to have existed? In fact, even those directly involved in the study of this subject could not satisfactorily determine how long its atmosphere has existed or can continue to exist.¹

Titan's atmospheric density creates a haze that, similar to what transpires on Venus, lends its sky an orange hue.² Experimental simulations in laboratories with what is believed to be the constituents of its atmosphere have resulted in a mist of organic-laden hydrocarbons.³ This would be the same "organic haze" we mentioned above that has been claimed to form a catalyst for the inception of life. It is therefore understandable that Titan's haze has supplied investigators with the hope that it, too, may harbour life-forming constituents.⁴ There have even been claims that such ingredients have actually been discovered in Titan's hazy atmosphere.⁵

The reason behind the inclusion of the above information on Titan stems from the fact that most researchers into the subject have been using it as a template for what Earth's atmosphere might have been like in primeval times. This has become especially so in relation to what the experimental simulations mentioned above have brought to light concerning the possible inception of life, as the following quotes quite clearly show.

"Tantalizingly, it has been suggested that a similar process may have happened on the early Earth."

"The thick organic haze that shrouds Titan is similar to what we had here on Earth billions of years ago; an environment that might have helped early life to get a foothold."

"Organic haze in the atmosphere of Saturn's moon, Titan, is similar to haze in early Earth's air—haze that may have helped nourish life on our planet—according to a NASA Astrobiology Institute study released Nov. 6, 2006."

RAINDROP IMPRINTS

One study that was splattered all over the Internet while this book was being written is said to indicate that, contrary to what has been delineated up to this point, Earth's primordial envelope could not have been much denser than it is at present. This resulted from a desperate new effort to resolve the problem concerning the manner in which the primordial Sun, which

¹ "NASA Cassini Finds Hydrocarbon Rains May Fill Titan Lakes," spaceref.com/news (January 29, 2009).

² R. Naeye & D. Tytell, op. cit., p. 17; R. Hazen, loc, cit.

³ F. Cain, "The Early Earth's Atmosphere was Similar to Titan[s]," *ubiversetoday.*com (November 7, 2006); J. Ruley, "Titan's Ice Volcanoes Might Produce Stuff of Life," *space.com* (August 14, 2008); "Titan's Hazes: A Rich Brew," *Sky & Telescope* (January 2011), p. 18.

⁴ S. K. Atreya, op. cit., pp. 42 ff.; D. Stolte, "Titan's Haze May Hold Ingredients For Life," uanews.org (October 7, 2010).

⁵ "Organic 'Building Blocks' of Life Discovered in Titan's Atmosphere," sciencedaily.com (November 29, 2007).

⁶ J. Ruley, *loc. cit.* (emphasis added).

⁷ F. Cain, loc. cit.

⁸ Ibid.

is still believed to have been from 20 to 30% dimmer than its modern value, could have kept Earth basking in a temperate climate. What this particular study centered on was the rain that is said to have fallen during Precambrian times.¹

Raindrops from Earth's dimmest past are believed to have left their pockmarks on various substances. It was through an investigation of such marks that the astrobiologist Sanjay Som, who hailed from the University of Washington, and his colleagues have purported to show that, close to three billion years ago, Earth's atmosphere "was much the same as it is today."

The concept behind Som's study had originally been proposed in 1851 by Charles Lyell, the foremost advocate of uniformitarianism in his day. It was he who had suggested that fossil raindrop imprints should be measured in order to estimate the pressure of the air through which they fell.³

"The shape of a raindrop impression is affected by the density and pressure of the air it fell through, the velocity of the drop and the material it fell onto. A thicker atmosphere slows the velocity of the raindrop, and makes the resulting impression smaller."

The imprints that Som and his colleagues used in their study came from the consolidated volcanic ash, known as tuff, dated to 2.7 billion years ago, that is found in the Ventersdorp Supergroup in South Africa. Utilizing the latex casts they made of this material, their experiment consisted in comparing the size of its imprints with what has been described as "rain-induced structures produced in the laboratory by water falling on volcanic ash." What this really entailed was the precipitation of water drops of known size from a height of 27 meters, in order to achieve terminal velocity, on fresh volcanic ash that was obtained from the Icelandic Eyjafjallajökull 2010 eruption as well as on weathered ash from a Hawaiian volcano. The information derived from these comparisons is said to indicate that, 2.7 billion years ago, Earth's air density was less than twice its modern levels.

Problems abound.

Raindrops more than 6.8 millimeters across are known to break apart while falling at terminal velocity regardless of air density, whereas the terminal velocity of the drops does vary in accordance with such density. It is this particular variation that determines the actual size of the drops at the moment of surface impact. As noted above, smaller drop impressions evince a lower speed that in turn bespeak a denser atmosphere. What the study in question therefore attempted to discover was the difference in size, if any, between archaic raindrop impressions and modern ones.

¹ S. M. Som, et al., "Air Density 2.7 Billion Years Ago Limited to Less than Twice Modern Levels by Fossil Raindrop Imprints," *Nature* (March 28, 2012), pp. 359-362.

² T. Nield, "Raindrops Keep Falling ..." Geoscientist (June 2012), p. 7.

³ K. Lee, "Fossil Raindrops Reveal Ancient Atmosphere," cosmosmagazine.com (March 29, 2012).

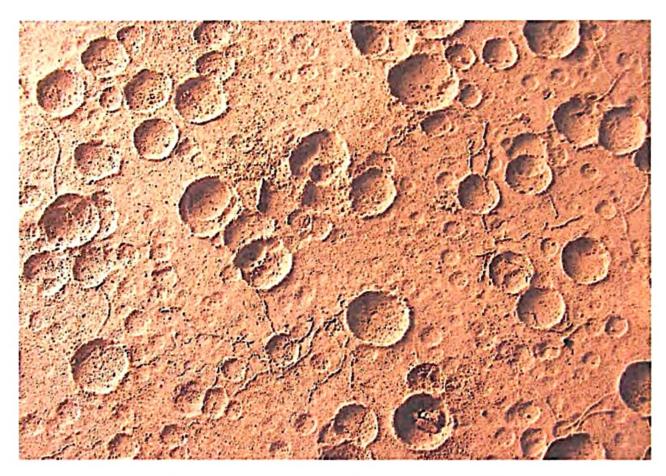
⁴ Ibid.

⁵ T. Nield, loc. cit.

⁶ K. Lee, loc. cit.

⁷ S. M. Som, et. al., op. cit., p. 362.

⁸ *Ibid.*, p. 359.



Purported raindrop imprints—but notice the difference in sizes. (Photograph courtesy of Roger Weller/Cochise College.)

The size of raindrops, however, is not entirely dependent on the density of the air through which they fall. Moderate showers can produce drops less than one millimeter across. Electric storms in summer can produce much larger drops, as much as five millimeters in diameter. The difference in these sizes may not seem too much to most laypersons, but they are of great significance in relation to the manner in which they splatter, and overlap, across the surfaces on which they land. Even terminal velocity can fluctuate within the same air density. Thus, the force with which such drops are known to fall can vary. The smallest drops can land softly on one's skin, while larger ones can hit with quite an impact.

Much worse than that, the drops of various sizes that were precipitated in the lab experiment, released through a pipette down an open stairwell into the tray that held the ash some 90 feet below, are hardly representative of a shower. As we all know, raindrops end up covering the entire surfaces on which they fall. It is only the first few drops, even when falling on dry mud, that will leave any sort of imprint. In most cases, the rain that follows ends up wiping such marks out of existence. Dust turns into mud, which then turns into slosh, while no imprints can result when rain hits solid ground.

According to Som and his colleagues, the volcanic ash of the Ventersdorp Supergroup that they examined must have still been fresh when the drops impacted on it. It is then claimed

that the raindrop imprints were buried by more ash soon after they were formed. The entire sandwich is then believed to have solidified and then slowly eroded down through the ages. The erosion, however, would have had to terminate precisely at the level in which the raindrops had imprinted their impact, thus leaving their intricacy for future humans to examine. What can I say? Believe it if you will.

In reality, had rain fallen on a fresh deposit of volcanic ash, it would have turned it into slurry within a very short time, and any newer ash that would have been deposited on top of it would have merely added to the soup. No imprints could have been preserved when the ash later solidified.

And yet, so-called fossil raindrop imprints, said to be up to a billion years old, can be found discussed in numerous textbooks and scientific papers on sedimentary geology. National parks across the United States, as well as elsewhere, proudly direct visitors to areas in which such imprints have been preserved and labeled for the education of one and all. Some of the best, claimed to be 1.4 billion years old, are to be found at Glacier National Park in Montana. One is therefore bound to ask how these so-called raindrop imprints could have been formed and preserved up to a billion years and more.

At this point, a better question to ask is: Are these age-old marks really raindrop imprints? Air bubbles rising through mud and other deposits also leave a scattering of imprints that can remain visible once the sediment solidifies. Such marks have been raised as an objection to the raindrop interpretation since 1842.¹

It has, of course, been claimed that Som and his colleagues chose fossilized ash to counter these very objections.² As Jueneman pointed out to me, however, the atmosphere surrounding volcanic eruptions would be heavily laden with particulate and gaseous components that can amount to several times the density of ambient air. Such density would impede the speed of any droplets falling through it to land on freshly precipitated ash. Viscosity should also be considered besides density since gases have a tendency to turn viscous with increasing temperatures and this, too, would have tended to impede any droplets falling through it.

On the other hand, air is not the only type of vapor that can effervesce from below sedimentary deposits and leave distinct imprints on the surface. Other vapors can also be the culprit.³ The individual grains of freshly fallen ash are commonly coated with soluble components derived from their interaction with volcanic-gas aerosols that are preponderant in most eruption columns.¹ The seepage of such aerosols, both up and down, through deposited ash can be quite prevalent.² Such leaching can, and often does, leave minute pit-marks that can later be attributed to other causes.

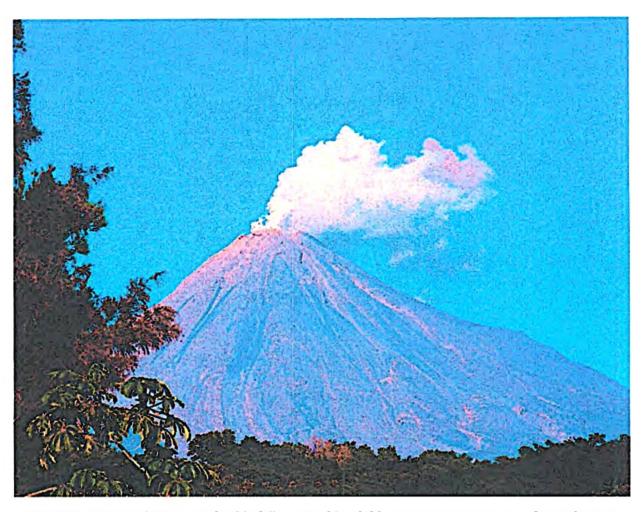
¹ W. Buckland, "On Recent and Fossil Semi-Circular Cavities Caused by Air-Bubbles on the Surface of Soft Clay, and Resembling Impressions of Rain-drops," Report of the British Association for the Advancement of Science (1842), pp. 57-58; See also, the commentary on the findings of E. Desor and others, as reported in the Proceedings of the Boston Society of Natural History, Vol. 3 (1850), pp. 200-202, as also in the Edinburgh New Philosophical Jornal, Vol. 49 (1850), pp. 246-248.

² K. Lee, loc. cit.

³ P. E. Cloud, Jr., "Gas as a Sedimentary and Diagenetic Agent," Bradley Volume of the *American Journal of Science*, Vol. 258A (1960), pp. 35-45.

¹ "Ash Properties & Dispersal by Wind," volcanoes usgs gov/ash/properties.html (February 3, 2009).

² Ibid.



Volcanic-gas aerosols that coat freshly fallen ash with soluble components are preponderant in most cruption columns such as the one shown above issuing from the Volcan de Fuego, Colima, Mexico.

(Photograph—December 2008—by the author.)

Despite all these objections, as Mounir Moussa from the University of Puerto Rico noted back in 1974, "the practice of ascribing these impressions to the action of falling rain drops has continued and the geologic literature abounds with examples of such interpretations." It seems as if not much, if anything, has changed since then in this respect.

CONFLICTING VIEWS

As we have seen, a denser atmosphere has been proposed by various authorities in order to explain Earth's primordial warmth as having been derived through "nitrogen pressure broadening or enhanced greenhouse gas concentrations." Som and his colleagues, however, have come to the conclusion that, while the experiment they conducted does not prove the

¹ M. T. Moussa, "Rain-Drop Impressions?" Journal of Sedimentary Research (December 1974), p. 1118.

¹ S. M. Som, et al., op. cit., p. 359.

"pressure broadening explanation" to be impossible, it did render it "improbable." They also claim that their results "disallow the extreme CO₂ levels required for hot Archaean climates." Since all of this was purportedly claimed to elucidate Earth's former fainter nascent Sun, one is therefore bound to ask: In what way does the elimination of these attributes better suit that particular belief?

The manner in which the results of this experiment have been interpreted raises its own dilemmas. As it was immediately claimed, what the experiment actually demonstrated is that Earth's past warm temperature resulted from an "abundance of greenhouse gases." One is left to wonder how an "abundance of greenhouse gases" can be understood when the results of the experiment are said to "disallow" extreme levels of CO₂, that is, carbon dioxide, which happens to be one of the most integral elements of greenhouse gases.

Additional to that, we simply cannot shy away from the physical evidence supplied by the fossilized tree amber mentioned above which indisputably shows a much more oxygen-rich atmosphere up to 10,000 years ago. There could not have been more oxygen in the air without it being denser. What is surprising is that some have taken Som's words to mean exactly that. According to them, what he and his colleagues actually "discovered" is that "ancient raindrops made smaller impressions than their modern counterparts," from which they then deduced that these "ancient raindrops" did likely fall "through a thick atmosphere" that was "full of greenhouse gases."

RESTRICTIVE MEASURES

What must more importantly be kept in mind is whether Earth's primordial heat was really caused by Earth's former dense envelope, as per Jueneman, rather than proto-Saturn's reflection off the inner surface of its encasing plasmasphere. As some are bound to ask, would not a denser cloud cover have actually kept proto-Saturn's heat from filtering through?

The ability of circulating gases in a planet's atmosphere to transfer heat from one hemisphere to another has been investigated.⁵ As in Jueneman's example, such heat transference has been considered feasible as long as the atmosphere on such a body would be "sufficiently thick." That assessment was required to account for phase-locked exoplanets in orbit around dwarf stars. And that such planets, phase-locked or otherwise, can be burdened with dense atmospheres was determined through analyses conducted in relation to the one dubbed 1214b. As in the case presented by Jueneman, the atmosphere of that particular planet is not only shown to be "made up largely of water vapor," but to be actually producing an immense amount of heat.²

¹ *Ibid.*, pp. 359, 362.

² Ibid.

³ V. Stricherz, "Fossil Raindrop Impressions Imply Greenhouse Gases Loaded Early Atmosphere," washington.edu/news (March 28, 2012).

⁴ T. Edgar, "Raindrops Tell the Story of Earth's Ancient Atmosphere," decodedscience.com (April 9, 2012)— (emphasis added).F

⁵ K. Croswell, "Red, Willing and Able," New Scientist (January 27, 2001), p. 30.

⁶ Ihid

¹ P. Raeburn, "Big Idea: Detect Alien Life on a Tight Budget," Discover (September 2012), p. 11.

² Ibid.

As everyone knows, however, dense clouds in Earth's atmosphere hinder the Sun's rays which tend to cool the air below them even on the hottest days of summer. Clouds also reflect a certain amount of light and heat back out to space, all of which adds to the cooling of the air beneath their spread. And yet, it is usually warmer on a cloudy, rather than a sunny, day in winter, since clouds can also act as a blanket trapping terrestrial surface warmth that would otherwise rise to mix with atmospheric cold. That is more or less what keeps the planet Venus basking in its excess heat.

That a dense atmosphere does not necessarily result in a warm climate, however, is evidenced by one of Saturn's satellites. As we have already noted, Titan's atmosphere is much denser than the one that spreads above us. And yet its surface temperature has been measured at -290° Fahrenheit, "cold enough to provoke chemistries and states of matter never seen naturally on Earth."

Despite all the above, however, there is still an awful lot we do not yet understand about planetary atmospheric conditions, all of which shifts the subject of Earth's primordial atmosphere into eddying murky waters. Take, as but one example, the tremendous density of the Venusian atmosphere which, as already noted, shames the one enshrouding Titan. While it remains the hottest planet in the Solar System, with surface temperatures bordering on 896° Fahrenheit, Venus holds on to what has been described as "a surprisingly cold region" high in its atmosphere. This region, which is "sandwiched between two comparatively warmer layers," is "much colder than any part of Earth's atmosphere." In view of such an odd atmospheric stratification, what can we really posit about the atmospheres of other planets including the one that shrouded Earth in its primordial past?

PLASMASPHERIC REFLECTIVITY

A related problem that has been raised by friendly critics concerns the effect proto-Saturn's reflected heat would have really had on a densely shrouded Earth.

Let me clarify that: Had Earth been burdened with the dense atmosphere we have been propounding while encased within the boundary of proto-Saturn's plasmaspheric envelope, any heat reflected off the inner opaque surface of the plasmasphere would have tended to warm Earth's cloudy atmosphere rather than its surface. Fair enough, the northern region of Earth's atmospheric blanket would have received direct heat from proto-Saturn. Yet even that would have fallen on Earth's murky overlay. Would that heat, as well as its additional reflectivity, have been able to penetrate Earth's heavy overcast?

As noted in previous volumes of this series, paleontological remains, as well as other evidence, speak for spindlier plants, especially trees, up until the age of mammals. It was not until then, predominantly during the Paleocene epoch, that Earth's land areas became engulfed in a verdant profusion of subtropical plants. This is partly why our present Sun is believed

¹ C. S. Powell, "News From Earth's Wayward Twin," Discover (April 2005), p. 42.

² N. Atkinson, "Surprise! Hot Venus Has a Cold Upper Atmosphere," *Universe Today @universetoday* (October 1.2012).

¹ D. Cardona, *God Star* (Victoria, British Columbia, 2006), p. 296-297; *idem*, *Primordial Star* (Victoria, British Columbia, 2009), pp. 10-11.



The spindly nature of plant-life during the Devonian period. (Photograph by the author, courtesy of the Museum of History, Hong Kong.)

to have been much fainter in the past. Our contention has always been that this dimness had been due to the sub-brown, proto-Saturnian, sun that would have been weaker, even at closer quarters.

Yet even so, one might still wonder how the proto-Saturnian sun could have been dim enough in the past to force plants to struggle for whatever light was available, and then increase its radiation from the Paleocene epoch onward. Of course, one can then argue that if the present Sun is believed to have increased its energetic yield as it matured, there should be nothing to hinder a similar belief concerning the evolution of a sub-brown dwarf star. In fact, has it not already been ascertained that brown dwarfs have a tendency to grow brighter with advancing age?¹

At this point I do not mind having to admit that I should have been more specific on this particular situation since the increasing brightness following the Paleocene epoch was not only due to proto-Saturn's own brightening with age. It was also due to the thinning of Earth's atmosphere, which had actually been transpiring in sudden episodes with each of proto-Saturn's successive flare-ups.

First of all, the blowing away of planetary atmospheres through the flaring outbursts of stellar hosts has now been substantiated through the evaporation of such an atmospheric

¹ R. Talcott, "First Forecast: Cloudy; No Rain," Astronomy (December 2002), p. 32.

envelope surrounding an extra-solar planet. Dubbed HD 189733b, the exoplanet in question is a Jupiter-sized body orbiting the star known as HD 189733. Through the use of the Hubble Space Telescope, a team of astronomers have detected "signs that the planet's atmosphere was evaporating, releasing strong bursts of gas" after it was "bombarded with intense X-ray radiation from a flare unleashed by its host star."

Much like their more massive siblings, dwarf stars have a tendency to flare up and most of them do so more than once throughout their long careers. While such flares might "damage life," they "might also help it evolve, by increasing the mutation rate." As far as our particular theory is concerned, it is such flares from Earth's primeval brown dwarf sun that accounted for past extinctions, to say nothing of mutational evolution. It is therefore our contention that, following the Paleocene epoch, Earth's primordial atmosphere would have been dispersed enough through proto-Saturn's previous flare-ups to allow the proliferation of plant-life that eventually attained sub-tropical diversity. By then, the reflection of proto-Saturn's heat off the inner opaque surface of its plasmaspheric envelope would definitely have had an effect.

As Jueneman himself well knows, had this not been the case, Earth's north celestial sun would have been hidden from view. True, there have been those who have theorized that Earth's primeval canopy might have exhibited a north polar clearing, an atmospheric hole, through which whatever sun had bathed Earth would have clearly shone through.³ But, as already noted in a previous volume,⁴ the close proximity of the proto-Saturnian sun would have raised Earth's atmosphere in a tide above its north pole which makes it rather doubtful that such a polar opening could have existed.

We had also stated in that very same volume that a 1,000 kilometer wide polar opening, through which the Sun might possibly be shining, had been discovered in the atmosphere of Venus,⁵ but, unfortunately, it was not subsequently confirmed. On the contrary, in the late 1970s, the Pioneer Venus Orbiter came across "a gigantic vortex" resembling "a colossal hurricane," but with a double rather than a single eye, at the planet's north pole.⁶ And early in the twenty-first century, the Venus Express discovered an identical double-eyed vortex at the opposing pole.¹

What all the above seems to imply is that Earth's primordial atmospheric envelope had already thinned enough through past proto-Saturnian flare-ups. This is augmented further by the clarity of extant reports concerning proto-Saturn's apparition in Earth's north polar sky up until the end of the Pleistocene epoch, all of which calls for Earth's primordial sun to have been clearly viewed by our ancient ancestors at that time. The flare-up that occurred at the end of that epoch would then have turned Earth's primordial atmosphere even more transparent.

¹ "Alien Planet's Evaporating Atmosphere Caused by Star Eruption," space.com (June 28, 2012).

² K. Croswell, op. cit., pp. 30-31.

³ See D. Cardona, God Star (Victoria, British Columbia, 2006), p. 385 for sources on this subject.

⁴ Ibid.

⁵ R. A. Gallant, Our Universe (Washiungton, D. C., 1980), p. 89.

⁶ R. Zimmerman, "Taking Venus by Storm," Astronomy (October 2008), p. 69.

¹ Ibid., p. 70; D. Powell, "Venus Does the Twist," Astronomy Now (June 2006), p. 11; D. E. Robertson, "Parched Planet," Sky & Telescope (April 2008), p. 28

And this, too, is indicated by the detailed reports of what mankind ended up remembering of what transpired on the heels of that event.

It is not that clouds would have been absent. There would even have been times when their consolidation would have overcast the sky, hiding heaven-on-high from view. In this respect, if in no other, Earth's atmosphere would have behaved no different than at present, even though it would have been piled up higher above Earth's north polar region.

Given all that, it also becomes quite obvious that proto-Saturn's heat would have easily shone through the atmosphere to warm Earth's northern hemisphere, while the southern latitudes could only have continued to be heated through the posited reflection off proto-Saturn's encasing plasmasphere.

Chapter 7

Climatic Repercussions

THE END OF AN ERA

s indicated in detail in previous volumes of this series, the much more energetic dust-laden formations of what have now turned into Earth's auroral ovals were responsible for casting circular ribbons of land, south of the Arctic and north of Antarctica, into perpetual shadow. It was the longtime shielding of these shadowed lands from the heat of Earth's primordial proto-Saturnian sun that gave rise to the miles-deep glaciation within their borders that account for Earth's series of ice ages. In the northern hemisphere, humanity abided north and south of this shadowed belt, since venturing into its glaciated region would have proven too hazardous. And while beasts, including dinosaurs, inhabited the land south of the shadowed demarcation in the southern hemisphere, humanity kept away from what was to become Antarctica.

The heat that was emitted by proto-Saturn's series of flare-ups was then responsible for the blowing away of these auroral toroids, together with a portion of the terrestrial atmosphere which, in turn, led to the melting of Earth's glaciated regions, bringing ice ages to their end.²

The last of these ages was the one that terminated the Pleistocene epoch at the time when the proto-Saturnian system penetrated the present Sun's plasmaspheric heliosphere. As with previous flare-ups, the melting of Earth's glaciated regions raised ocean levels all over the world, inundating islands and vast stretches of continental shelves.

DOGGERLAND

There is, at present, a large sandbank, 6,800 square miles in area, in a shallow region of the North Sea off the east coast of England. It has, for years, been known as Dogger Bank, a name derived from dogger, an old Dutch word for "fishing boat." The name owes itself to the bank's close proximity to the Netherlands—otherwise known as Holland—and the rich marine harvests that drew British and other European fishing boats to the area.

Through the years, trawlers have retrieved the remains of plants, animals, and flint tools, from areas around the bank in question, all of which have been studiously analyzed since 1913. Comparisons with similar specimens from other geographical regions narrowed their provenance to the end of the Mesolithic and beginning of the Neolithic eras.

Up until recently, Dogger Bank was believed to be a moraine—that is sedimentary till deposited by a glacier—that formed in the Pleistocene epoch. As time went by, and more

¹ D. Cardona, *Primordial Star* (Victoria, British Columbia, 2009), pp. 260 ff.

² Idem, Flare Star (Victoria, British Columbia, 2007), pp. 370 ff.

¹ A. H. Stride, "On the Origin of the Dogger Bank in the North sea," Geological Magazine (January 1959), pp. 33-44.



objects were retrieved from the surrounding area, it became evident that the bank had once occupied the highland of a much larger stretch of land which geologists, keeping to the original nomenclature, have named Doggerland.

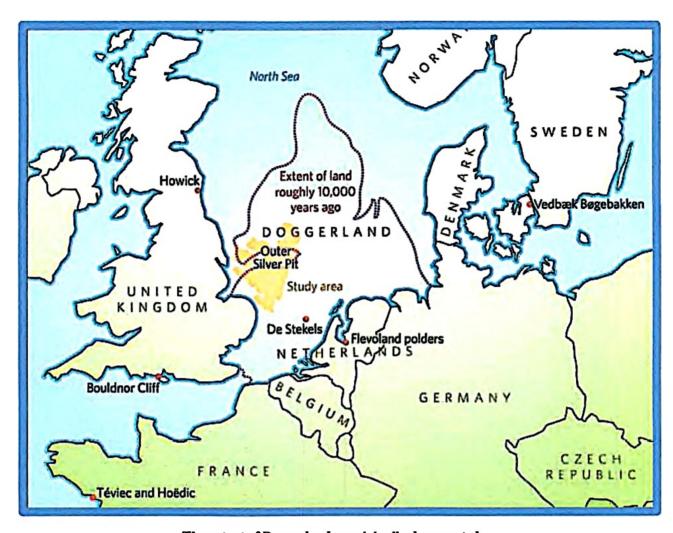
This stretch of land was just one of many others around the world that was inundated by the rising sea levels brought about by the melting of the glaciers at the end of the Pleistocene Ice Age. In this particular region, the sea is believed to have been 390 feet lower than at present. I single it out here in passing because the continued exploration of the area, especially during oil prospection by various companies, has recently resulted in a plethora of discoveries while this very work was being written.

While Doggerland was originally believed to occupy 10,000 square miles, it is now considered to have covered an area much more extensive than that. Some have compared its area to that of present western Canada, while others have been more specific by equating it to the state of California, which covers 163,696 square miles in area. It apparently stretched from Ireland and Scotland eastward to Denmark, all the way south to France, and tapered northward as far as Norway.¹

Through various means, the land has been determined to have been a hilly region, cut through with valleys, crisscrossed with streams and rivers, strewn with swamps, lagoons, salt marshes, mudflats, and lakes, and edged with fine beaches.² It constituted the richest hunting,

¹ A. Bojanowski, "Steinzeit: Karte Zeigt das Versunkene Herz Europas," Spiegel Online (July 6, 2012).

² Various accounts too numerous to itemize.



The extent of Doggerland as originally demarcated.

fowling, and fishing area in all of Europe during the Mesolithic period.¹ The thousands of artifacts,² not to mention human bones, as well as those of various animals, including mammoths, that have so far been retrieved, indicate that the land had been home to tens of thousands of people, some of whom were roaming foragers, but also hunters, while others seem to have been sedentary. As Richard Bates, a geochemist at St. Andrews University in Scotland, reported: "It was the true heart of Europe."³

A fragment of a human skull that was dredged up from the Zeeland Ridges off the Netherland coast has been identified as having belonged to a young Neanderthal man and dated from 50 to 60 thousand years old.⁴ Although, on its own, it cannot be relied on as positive proof, this would seem to indicate that, despite previous claims to the contrary, this

¹ Ibid.

² W. Patterson, "Coastal Catastrophe," University of Saskatchewan paleoclimate research document (2012).

³ "Discovering Drowned Doggerland," st-andrews.ac.uk/news/archive (July 3, 2012).

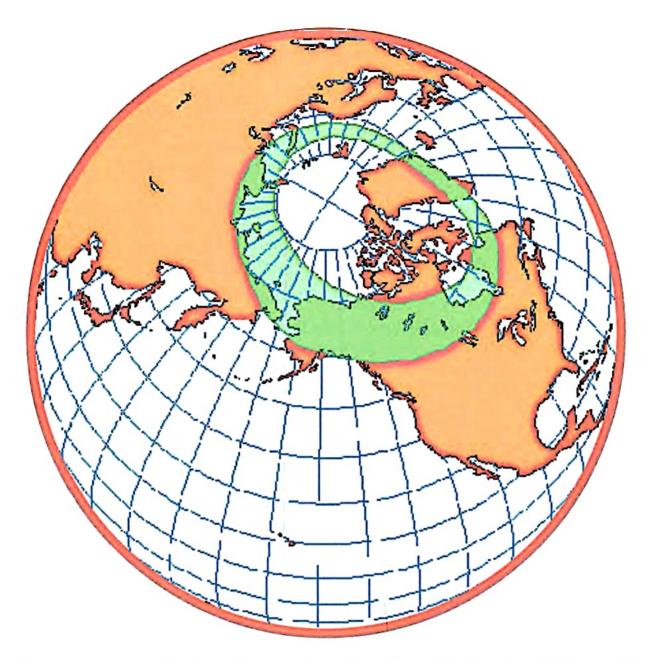
⁴ "Neanderthal of the North sea," Natural History Museum archive at *nhm.ac.uk* (June 15, 2009); P. Rincon, "Sea Gives Up Neanderthal Fossil," *news.bbc.co.uk* (June 15, 2009).



Doggerland's present theorized extent—shown in red. NOTE: Stars denote geographical points of interest. (Illustration courtesy of University of St. Andrews, Scotland.)

part of Europe could not have been covered by the millennial glaciers of the Pleistocene Ice Age. It does, however, fall in line with our postulate that the glaciated region was the encircled area created by the shadow cast upon the land by Earth's previous dust-laden auroral toroids. Indeed, this is actually augmented by Doggerland's above theorized ecology.

¹ See also, D. Cardona, "Earth's Primeval Polar Heat," *Proceedings of the Natural Philosophy Alliance*, Vol. 8 (2011), pp. 102-106.



The general area covered by the northern auroral zone (shown in green) that, in primordial times, would have been glaciated due its having been in perpetual shadow. Note that the area that was once Doggerland lies entirely outside the auroral demarcation.

Traces of an immense underwater mudslide that has become known as the Storegga Slide have been found off the coast of Norway. The tsunami that this slide created is believed to be the cause behind Doggerland's final obliteration. The slide itself is claimed by Peter Bryn and

¹ B. Weninger, et al., "The Catastrophic Final Flooding of Doggerland by the Storegga Slide Tsunami," *Documenta Praehistorica*, XXXIV (2008), pp. 1-24.

his colleagues to have been triggered by a strong earthquake in the north Atlantic Ocean, but, as Bernhard Weninger and his associates contend, "further investigations are necessary to substantiate this hypothesis."²

As far as our reconstruction is concerned, had it been an earthquake that caused the slide in question, it would only have been one among numerous others that were initiated by Earth's rotational braking in response to proto-Saturn's flare-up.³ Although Earth's former rate of spinning resumed not long after, this temporary braking resulted in the oceans' further incursion over large areas of the land, drowning entire cultures that had thrived in coastal regions.

I will not here go into the radiocarbon-derived dates that have been supplied for the entire series of events concerning the submergence of Doggerland since these have varied from one researcher to another. All that can be ascertained is that it all transpired at the termination of the Pleistocene Ice Age, which we have dated to approximately 10,000 years ago.

SOUTHERN COLONIZATION

Besides the tremendous tectonic activity that it caused, including worldwide earthquakes, landslides, volcanism, and wholesale diastrophism, Earth's temporary rotational braking also caused additional heat due to the friction that took place between Earth's crustal layers. Added to proto-Saturn's own emitted heat, the sudden rise in drastically elevated temperatures was responsible for more than the melting of the ice. It also caused world-wide forest fires while engulfing all and sundry in a tremendous sheet of cosmic radiation, including X-rays and other potentially harmful beams and particles, to which Earth and its inhabitants were subjected.

In the end, while continental shelves were permanently drowned, and lands farther inland became temporarily inundated, previous glaciated areas were reclaimed. Although it did not transpire all at once, the eventual greening of these regions added tremendously to the habitability of Earth's reclaimed areas across which surviving coastal cultures migrated in search of safer grounds. The first wave of Aboriginal seafarers, however, had already settled north of the glaciated area in Earth's southern hemisphere.

By the end of the 1950s one found it flatly stated that: "No reliable evidence of the antiquity of the human occupation of Australia has been found." Moreover, it was widely held that great antiquity "need not be postulated" to allow the original inhabitants to spread and occupy the entire continent. By 1999 it could still be found stated that no one knows exactly when the first humans arrived in Australia.

Somewhat earlier, however, around 1968, it was beginning to be claimed that humans had been in Australia since about 8,000 years ago. And although by 1991 it was still being

¹ P. Bryn, et al., "Explaining the Storegga Slide," Marine and Petroleum Geology, Vol. 22 (January-February 2005), pp. 11-19.

² B. Weninger, et al., p. 2,

³ D. Cardona, Flare Star (Victoria, British Columbia, 2007), pp. 372 ff.

⁴ A. P. Elkin, "Australia," Encyclopædia Britannica (1959 edition), Vol. 2, p. 714.

⁵ Ibid

⁶ T. Allan, "An Unseen World," in T. Allan (as editor) Journeys Through Dreamtime (Amsterdam, 1999), p. 9.

⁷ B. Bryson, A Short History of Nearly Everything (Canada, 2004), p. 455.

claimed that "few details of their history are known," the date of human arrival in Australia was first raised to 20,000 years ago, then to 30,000 years ago, and earlier still. As Tony Allan tells us, "the oldest known remains were of campsites that radio-carbon dating showed to have been inhabited 35,000 to 40,000 years ago."

50,000 years ago was the next figure given,⁴ but, as Allan continues to inform us, "in recent years the date has been pushed steadily further back into prehistory." By 1995, as a famous encyclopedia told us, "some scholars" began to suggest that "human occupation [in Australia] may date back 60,000 years." In an endeavor to push the date of the Aborigines' arrival as far back as possible, more than one authority has latched on to this earlier date.

An age of 60,000 years was actually assigned to a skeleton discovered at Kow Swamp in northern Victoria which, as Allan notes, is "a long way from any point of arrival on the continent." Thus, a landfall of *over* 60,000 years ago was finally established for probable arrival. And, despite the fact that the date of the Kow Swamp skeleton has been "much disputed," human presence in Australia was eventually dated to 65,000 years ago on the basis of even newer discoveries in the northern territory. Others have however opted for a somewhat later landfall around 40,000 to 50,000 years ago. 10

The people who made the crossing to Australia, according to Allan, "were almost certainly Australoids, members of a group distinguished by dark skin and a flat, retreating forehead whose surviving representatives include the Aborigines and the inhabitants of many Melanesian islands today." 11

At present, one finds similar Australoids among some of the hill tribes of southern India, the Veddas of Sri Lanka (formerly Ceylon), some small groups in Malaysia, besides the Melanesian islands. Their remote origin has proved to be somewhat controversial. Some have traced it to *Pithecanthropus* who once inhabited Java. "It has, however, been suggested on morphological grounds that the physical characters of the aborigines could have arisen in southwest Asia." Thus, an origin in southern China has also been claimed.¹³

How did these people get to Australia?

¹ T. E. Hays (editor), Encyclopedia of World Cultures, Vol. II (Boston, 1991), p. 16.

² J, Bailey, The God-Kings and the Titans 9N. Y., 1973), p. 98.

³ T. Allan, loc. cit.; see also A. Gonen (editor), The Encyclopedia of the Peoples of the World (N. Y., 1993), p. 59; J. M. Adovasio (with J. Page), The First Americans (N. Y., 2002), p. 117.

⁴ Ibid., p. 239; S. Perkins, "Going Under Down Under: Early People at Fault in Australian Extinctions," sciencenews.org (January 20, 2007).

⁵T. Allan, loc. cit.

⁶ Micropedia of The New Encyclopædia Britannica (1995 edition), Vol. I, p. 714; B. Bryson, loc. cit.

⁷ See, for instance, J. Shreeve, *The Neandertal Enigma* (N. Y., 1995), p. 255; J. Diamond, "Mr. Wallace's Line," *Discover* (August 1997), p. 83.

⁸ Ibid.; J. M. Adovasio, op. cit., p. 241.

⁹T. Allan, loc. cit.

¹⁰ P. James & N. Thorpe, Ancient Inventions (N. Y., 2006), p. 79; "Island Invasion," Science Illustrated (January/February 2010), p. 75; R. Shore, "Cracking the Cave Codes," The Vancouver Sun (February 27, 2010), p. B3; J. Hayes, "Did Australian Aborigines Reach America First?" cosmosmagazine.com (September 30, 2010).

¹¹ T. Allan, loc. cit.

¹² A. P. Elkin, op. c it., p. 713.

¹³ Micropedia of The New Encyclopædia Britannica (1995 edition), Vol. I, p. 714.

As Jared Diamond noted, in order to reach the Australian continent from an Asian homeland, the ancestors of the Aborigines would have had to cross "a dozen straits separating Australia from Asia." This "provides by far the earliest evidence in human history for an ability to use watercraft" which would have been "tens of thousands of years" earlier than the use of watercraft "anywhere else in the world."

At the height of the last Ice Age, however, Australia and New Guinea had been joined together as one land. Tasmania, too, has been claimed to have been joined to these two presently divided lands. As already noted, this was because the Ice Age glaciers had stolen and stored a vast proportion of the world's oceanic waters, thus dropping sea levels and laying dry vast stretches of land that are now submerged beneath the waves. This previous single landmass—Tasmania, New Guinea, and Australia—has been christened by geologists who have chosen to call it by the name of Sahul. This landmass was itself separated from what the same geologists have termed Sundaland, which comprised the whole of south-east Asia, Sumatra, Java, and Borneo.³ The joining together of all these lands would therefore have facilitated the migration of the Aboriginal ancestors by lessening the number of, but not entirely removing, open water stretches between Australia and their Asian point of departure. As Allan further noted:

"The first colonists came to Sahul from the Indonesian islands to the north. They could well have traveled all the way from the Asian mainland without ever having to travel more than 100 kilometers over open sea; the final hop, from Timor to the Kimberley Plateau, would have been the longest: a journey of just eighty-seven kilometers."

Such a journey would still have required watercraft of some sort. "No remains of early boats have survived," Allan, however, goes on, "but the assumption is that the newcomers drifted across the straits from Indonesia on rafts made of lashed strips of bamboo or mangrove wood." Although the present Aborigines cannot rightly be called a sea-faring people, both rafts and canoes are actually used by them. More than that, canoes are mentioned in their myths, attesting to their use in great antiquity.

The Australian Aborigines were not the only people to have sailed this far south prior to, or during, the Ice Age. The natives of New Guinea also did. But here one encounters something of a conundrum since the natives of New Guinea are believed to have sailed northward from Australia itself around 40,000 B.C. By 35,000 B.C., Tasmania, too, had been populated, making the Tasmanians "probably the Earth's southernmost people during the last Ice Age."

If all this, or something close to it, was really the case, the Aborigines should have retained a memory of the rising oceanic level that would have separated their new homeland from the lands farther north. In fact, they do remember "the great floods that followed the end of the last

¹ J. Diamond, loc. cit.

² Ibid.

³ J. Wolf, *The Dawn of Man* (N. Y., 1978), p. 162.

⁴T. Allan, loc. cit.

⁵ Ibid.

⁶ D. Vitaliano, Legends of the Earth (London, Ontario, 1973), p. 166.

⁷ T. Allan, op. cit., p. 10.

Ice Age." One of their myths tells how a gigantic frog once swallowed all the water in the world, which reflects a retention of the time sea levels dropped. Following that, being made to laugh by the other animals, the frog disgorged the water which "gushed out in a terrible flood and many were drowned." Legends, as opposed to myths, are even more telling. All along the southern shores of the continent, Aborigines can still relate tales of the distant past when the sea level was lower and the coast extended farther south. Tales are also told about the Port Philip Bay area by the Aborigines of the Mornington Peninsula. It is claimed that this area had previously been flat and fertile hunting ground before a violent storm threw the sea upon the land where it has stayed ever since. Michael Kerrington presents the case in the following words:

"As it happens, archaeological evidence seems to support the theory that these northern areas were indeed subject to fearful floods in the temperate aftermath of the last Ice Age. The dramatic rise in sea levels that resulted when the ice caps finally thawed brought about large-scale inundations in coastal areas worldwide. The societies of northern Australia seem to have been particularly badly affected—the effects can be discerned in everything from settlement patterns to rock art. The myth of a cataclysmic worldwide flood is believed by scholars to have originated at about the same time as the post-glacial changes stabilized themselves to mark out the Australian shoreline at its present level."

Unfortunately, Kerrigan confused legends of the rising of the sea with those told of a deluge brought about by heavy rains, a deluge that bears quite a few characteristics similar to those associated with the later Noachian flood.⁶ But let that pass.

One might also be tempted to discount the aforementioned dates re the peopling of the Australian continent since these were based on the radiocarbon technique which has come under severe criticism from various quarters including some highly orthodox ones. As Gwen Schultz, for instance, pointed out, the radiocarbon dating technique is believed in by many geologists and doubted by as many others. Geologists like William Pecora and Meyer Rubin have even gone as far as admitting that all such methods presently in vogue "are wrong," and that this "must be acknowledged" by the geologic community. As Charles Ginenthal ably demonstrated, despite the fact that I do not accept all of the conclusions he reached from this, radiocarbon dating of wooden remains, including charcoal, as also seeds, reeds and grasses, tend to give dates that are older, even "considerably older," than the sites in which such objects are eventually found. But, in this particular case, even I have to ask: Could the dates in

¹ M. Kerrigan, "A Timeless Land," in T. Allan (editor), op. cit., p. 23.

² D. Vitaliano, loc. cit.

³ Concerning the difference between myths and legends see D. Cardona, *God Star* (Victoria, British Columbia, 2006), p. 1.

⁴ J. Isaacs, Australian Dreaming (Sydney, 1980), p. 26.

⁵ M. Kerrigan, op. cit., p. 28.

⁶ *Ibid.*, pp. 28-29.

⁷ G. Schultz, The Ice Age Lost (N. Y., 1974), p. 29.

⁸ C. Ginenthal, *Pillars of the Past* (N. Y., 2003), pp. 118-155; see also P. James, et al., Centuries of Darkness (New Brunswick, 1993), p. 386.

question be wrong by as much as 60,000 or more years? Besides, would this not throw the Aboriginal memory of the rising sea levels out of the arena?

One could then argue that memories of the rise in sea levels by these people might pertain to a later era. Thus, for instance, the level of Lake Victoria, in south Australia, seems to have risen since 6,000 years ago. This came to light when an Aboriginal cemetery containing something like 10,000 skeletons was discovered beneath its water when the lake was drained to inspect a dam. The age of 6,000 years ago was estimated by Colin Pardoe, an archaeologist then working out of the South Australian Museum in Adelaide. Excavations near the cemetery also uncovered a huge cache of worked stone tools in the form of blades and scrapers, as well as huge amounts of animal bones and mussel shells. Together with the cemetery, this led Pardoe to the realization that "the site was used by a large, settled population—which is not how archaeologists thought the Australian Aborigines lived." As he pointed out:

"Everybody has this view of hunter-gatherers aimlessly wandering from water hole to water hole, looking for things to eat. This knocks down all those stereotypes."²

This discovery proves that inundations continued to take place in Australia long after the end of the Ice Age. And with various other sea level rises and drops throughout the ages, how can we be certain that what the Aborigines really remember is the rising level at the end of the Ice Age? Of certainty there is none, but one must also keep in mind that these people can still name and locate mountains that are believed by geologists to have been under the sea for the last 8,000 years.³

One other problem that might be raised by those already in the know concerns those Aboriginal myths they happen to share with ancient societies, and even civilizations, that thrived *much later* in the *northern* hemisphere. These later northern myths, however, were introduced into Australia by a second wave of colonizers somewhere around 5,000 years ago, which we need not here go into. All that we need to keep in mind at this particular point in our reconstruction is that the *first* wave of Aboriginal seafarers had already settled in Australia long before the end of the Pleistocene Ice Age.

TEMPORARY SETBACK

Despite all that, the sudden emission of proto-Saturn's heat did not result in a relentless summer down into the present, since the vast amount of dust that its flare-up also released was captured in Earth's atmosphere due to gravitational attraction. What resulted then was a provisional return to a cold climate that has gone down in geological history as the Younger Dryas.

¹ S. Menon, "10,000 Australians," *Discover* (January 1995), p. 52.

² Ibid.

³ New Scientist (January 13, 1996), p. 40.

⁴ See, here, D. Cardona, "Aboriginal Recollections," Chronology & Catastrophism Review (2012), pp. 11-12

⁵ *Ibid*., pp. 12-15.

That this sudden cooling was caused through the impact of a comet, or a loose collection of cometary fragments, as Ivan Semenik reported, "received generous airing in the popular press and in television documentaries." Its reception within the scientific community, however, "more closely resembled an ice-age chill." Yet even so, some of the objections to this view were actually ridiculous. Take, for instance, the one raised by the planetary scientist Clark Chapman. His objection rested on his belief that such impacts are "extremely unlikely" to have occurred as recently as the date supplied for the Younger Dryas event. "Something like that," he said, "should happen only once every 10 million years or so." He could actually state this despite the fact that Comet Shoemaker-Levy 9 had plowed into Jupiter only a few years before, in July of 1992.

Some of the evidence that a cosmic object had impacted Earth to cause the event under discussion came from the concentrations of microscopic spherules that Richard Firestone discovered at various sites along the Younger-Dryas Boundary. The contents of these spherules, including nano-sized diamonds, convinced him and his colleagues that they are of extraterrestrial origin. While we have reported much of this in one of our previous volumes,³ it has since been touted that Todd Surovell, from the University of Wyoming, failed to discover such spherules at the sites in question.⁴

A new study conducted by Malcolm LeCompte and his colleagues, the results of which were published in the September 17, 2012 issue of the *Proceedings of the National Academy of Sciences*, has however indicated that "Surovell's work was in vain" because he did not follow the proper procedure.⁵ As LeCompte stated:

"We missed it too at first. It seems easy, but unless you follow the protocol rigorously, you will fail to detect these spherules. There are so many factors that can disrupt the process. Where Surovell found no spherules, we found hundreds to thousands."

In the end, this new study provided "further evidence" that the re-freezing of the Younger Dryas by some sort of cosmic impact "may not be such a far-fetched notion," even though the microscopic spherules at the heart of the controversy were now found to have been "formed from earth materials" rather than from cosmic ones. Despite that, however, the spherules were still judged to have been probably due to an extreme cosmic impact, even though, as LeCompte himself admits, it "falls short of proof positive."

As those familiar with the prequels to the present work rightly know, our reconstruction of

¹ I. Semeniuk, "Ice Age Impact," Sky & Telescope (September 2009), p. 21.

² *Ibid.*, p. 24.

³ D. Cardona, *Metamorphic Star* (Oregon, 2011), pp. 154-155, 199, 204.

⁴ "Comet May Have Exploded Over Canada 12,900 Years Ago After All," sciencedaily.com (September 18, 2012).

⁵ Ibid.

⁶ *Ibid*. (emphasis added).

⁷ Ibid.

⁸ M. Shipman, "New Research Findings Consistent With Theory of Impact Event 12,900 Years Ago," North Carolina State University at ncsu.edu/abstract/science, (September 24, 2012).

Earth's cosmic history does not subscribe to cometary or meteoric impacts as the cause for the sudden re-freezing that led to the short-lived Younger Dryas event. After all, even Firestone was not really all that sure what was the real cause of the event. Nevertheless, as his colleague Allen West reported, "the evidence for some kind of cosmic event is overwhelming." Judging by the congruence of relative dates in relation to what else we have discovered to have occurred, the cosmic event behind the inception of the Younger Dryas would have been the same proto-Saturnian flare-up that brought the previous Ice Age to its end—or, to be more precise, the cosmic dust that enshrouded Earth in its aftermath.

It is not that meteoric rubble did not impound the terrestrial surface. On the contrary, a multitude of such bodies—detritus from proto-Saturn's flare-up and its circumstellar disk—hurtled through Earth's atmosphere, producing a series of air-shocks that scoured the land in various regions.

Among these cratered areas was the North Sea, the very region that had originally been occupied by Doggerland. The Storegga Slide we discussed above could therefore have been caused by this train of exploding bolides rather than the earthquake that has been claimed by Peter Bryn and his colleagues.³

There are those who blame these multitudinous North Sea craters on the escape of methane gas from beneath the bottom of the sea,⁴ but if escaping gas was the culprit, it should have left circular, or near-circular, cavities, or, better still, conical hydrothermal vents like those in other oceans around the world as described in our previous chapter. As it, however, turns out, these prominent indentations are elliptical in shape while sharing a directional alignment.⁵ They should therefore be included with supplementary directional impacts from other parts of the world.⁶ Since the source of the impacting rubble lay suspended in Earth's north celestial pole, the blasts carved the land in a conglomeration of elliptical depressions that lined up in a northwest-southeast direction from North and South America,⁷ across Europe,⁸ all the way to Asia.⁹

To be sure, methane is escaping through the North Sea openings, but it would have been these multiple impacts from above that broke through the surface, releasing the methane and other gases that had accumulated underground when Doggerland had still been above the surface of the sea.

¹ R. B. Firestone, "The Case for the Younger Dryas Extraterrestrial Impact Event: Mammoth, Megafauna, and Clovis Extinction, 12,900 Years Ago," *Journal of Cosmology*, Vol. 2 (November 2009), available at *journalofcosmology.com* (November 10, 2009), pp. 5, 11, 13, 18; see also D. Cardona, op. cit., p. 163.

² I. Semeniuk, op. cit., p. 21.

³ P. Bryn, et al., loc. cit.

⁴ M. Hovland, "Methane and Minor Oil Macro-Seep Systems—Their Complexity and Environmental Significance," *Marine Geology* (December 1, 2012), pp. 163-173.

⁵ R. McQuillin & N. G. T. Fannin, "Explaining the North Sea's Lunar Floor," New Scientist, Vol. 83 (1979), pp. 90-92.

⁶ See here D. Cardona, op. cit., pp. 133 ff., 152 ff.

⁷ See here, D. Cardona, op. cit., pp.156-160.

⁸ *Ibid.*, p. 160

⁹ N. Iqbal, et al., "Some Early Astronomical Sites in the Kashmir Region," Journal of Astronomical History and Heritage, Vol. 12, No. 1 (2009), p. 62.

How long this deep freeze lasted is variously given by different authorities, with lengths ranging from 1,400 to 700 years. This re-freezing episode had not, however, been as severe as it had formerly been believed, while its end was just as sudden as its inception had been.

RENEWED EXTINCTIONS

Despite all that, however, the calamities incurred by Earth through proto-Saturn's flare-up were responsible for great loss of life among both beasts and man. Vast hordes of animals that existed during the Ice Age were completely exterminated, never again to grace the land or the oceans they once inhabited.

Those who were still unaware, or unconvinced, of proto-Saturn's flare-up continued to wonder why so many Ice Age animals disappeared so suddenly. According to their own schemes, the rising ocean levels from melting glaciers would have been slow enough to give both animals and man ample time to move to dryer lands. Uniformitarian models do not include terrestrial braking, so that the additional sudden devastating incursion of oceans across continental coasts is not accepted and cannot, therefore, be called upon by such models to account for such wholesale disappearances. Added to that, were we to disavow the abrupt catastrophic nature of the event, the resulting warmth should have proved more beneficial to both animals and man.

There have been those who blamed the disappearance of these animals on the ensuing growth of woody shrubs and trees that replaced the grasslands over which these beasts had formerly roamed.⁴ Others laid the blame on the tribal stalkers who supposedly followed the retreating glaciers and managed to hunt these beasts into extinction. ⁵ It is not asked why a richer and far greener setting would have supplied these animals with less nutritional food or how hunters would have managed to exterminate all these beasts at a time when the woody environment they now occupied would have given them greater shelter than the open grasslands from which they came. Besides which, this concept fails to justify why the hunters themselves were greatly reduced in numbers?

Some species, including mammoths, however, did manage to survive in isolated pockets, just as tribal units of mankind also did. One of these pockets existed in what is now Stevens Village, along the Yukon River, in Alaska, where DNA from the hair, skin, and feces of these animals was extracted from the permafrost and analyzed. What came to light from this analysis not only indicated that these beasts survived the warming periods that followed the end of the Ice Age, but that they did so "for many hundreds of thousands of years."

¹ I. Semeniuk, op. cit., pp. 20, 22, 23; C. Hoffman, "Exploding Asteroid Theory Strengthened by New Evidence Located in Ohio, Indiana," uc.edu/news (July 2, 2008); "The Blue Planet," globalchange.umich.edu (June 13, 2009), p. 5.

² D. Cardona, op. cit., pp. 195-196.

³ *Ibid.*, p. 196.

⁴ E. Struzik, "Yukon Permafrost Yields Answers to Mysteries," *The Vancouver Sun* (December 27, 2011), p. B3. ⁵ *Ibid*.

¹ Ibid.

GIANTS ON THE WANE

Extermination and/or survival is not, however, the entire story, since some of the beasts that did survive did so in a physically shrunken size. Thus, as one example out of many, some of North America's equine creatures had earlier been much bigger. Although horses eventually disappeared from North America until reintroduced by Spanish colonizers, they were quite prolific in Arctic regions during the Pleistocene epoch. Judging by a fossilized equine skull that has been unearthed out of the Yukon permafrost, some of these horses had to have been giants when compared to modern ones.¹

Fossilized remains on the other side of the world, in Syria, indicate that early human and/or Neanderthal Ice Age hunters were stalking camels—single-humped dromedaries, to be exact—that stood up to 13 feet in height, twice the size of their modern counterparts, and weighed some 1.5 tons.² Giant camels are also known to have existed in North America from where they are believed to have migrated into Asia across the Bering Land Bridge.³

It was, however, not merely animals that were of a larger stature prior to the end of the Pleistocene Ice Age. If we are to believe ancient Jewish sources, "man's stature" was also "shortened." And this, too, has been validated through comparison of the skeletal remains of ancient humans with those of modern man, all of which indicate that our primeval ancestors were, on average, actually taller. 5

We have, in a prequel to this volume, indicated how the strength of Earth's gravity has progressively intensified through proto-Saturn's numerous past electrically-induced flare-ups. Gigantism among life-forms was thus reliant on Earth's past attenuated gravity. Evidence for this can be gleaned through recent studies that have been conducted on astronauts in space, who have been shown to have grown "up to 3 percent taller during the time spent living in microgravity." Stated more prosaically, what that means is that a six-foot tall person can gain as much as two inches while in orbit. "Past studies have shown that when the spine is not exposed to the pull of Earth's gravity, the vertebra can expand and relax, allowing astronauts to actually grow taller."

Two inches might not be seen all that much, but keep in mind that the astronauts' gain in height is limited by the amount that the vertebra can expand as also by the very short period spent in spatial microgravity. But even that small gain is short lived. "Once the astronauts return to Earth," and thus back to present gravitational attraction, "their height returns to

¹ Ibid.

² D. Mosher, "Walking Water Towers Coincided with Neanderthals and Humans," *Discover* (February 2007), p. 15.

³ Ihid

⁴ L. Ginzberg, *The Legends of the Jews*, Vol. V (Philadelphia, 1968), p. 152.

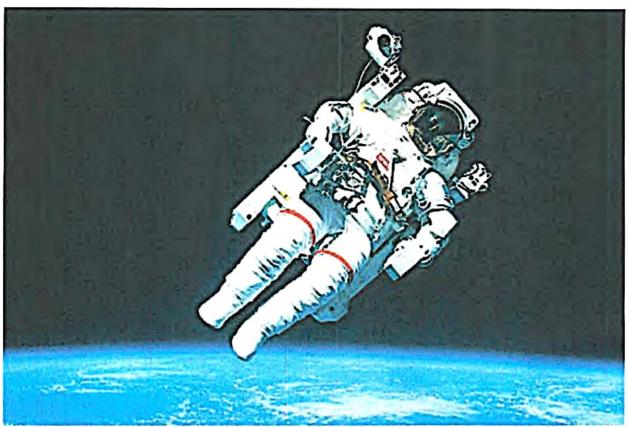
⁵ R. Lewin, "Rise and Fall of Big People," New Scientist (April 22, 1995), pp. 30-33; P. Gwin, "Lost Tribes of the Green Sahara," National Geographic (September 2008), pp. 133, 137

⁶ D. Cardona, *Primordial Star* (Victoria, British Columbia, 2009), p. 250.

⁷ M. Kramer, "Strange But True: Astronauts Get Taller in Space," space.com (January 7, 2013).

⁸ Ibid.

⁹ Ibid



Astronauts in space have been shown to grow up to 3 percent taller during the time spent living in microgravity. Shown above is astronaut Bruce McCandless during his spacewalk outside the Challenger space shuttle in 1984.

(Photograph courtesy of NASA.)

normal after a few months."1

If nothing else, these studies prove that bodily height, and perhaps even overall robustness, depends on the strength of gravity beneath which the specific life-form happens to abide. Even so, as also noted in previous volumes of this series, just because certain forms of life achieved gigantic proportions in the past does not mean that all life during that same time had to attain a similar size. After all, even under Earth's present gravity, we find animals as large as elephants and as small as mice, and men as tall as the Watusi and as short as the Efé. In other words, just because life can achieve gigantic size under lesser gravitational attraction does not mean that all life should.

SPORADIC MUTATIONS

The cosmic radiation released by proto-Saturn's flare-up would also have been laden with ultraviolet emissions. As shown by Permian fossils from Greenland, deformities among life-forms can result from extended exposure to such emanations. Judging by the fossil record,

¹ Ibid.

¹ P. D. ward, "Impact From the deep," Scientific American (October 2006), pp. 70-71.

there is little doubt that proto-Saturn's fallout resulted in the birth of mutated offspring both among surviving animals and humankind. However, with some possible exceptions, including racial diversions among humans, most of these mutations were not passed on to following generations.

High levels of ultraviolet radiation, however, are not necessarily harmful to all forms of life under all conditions.¹ Not only can life adapt to high ultraviolet rays,² in certain cases these emissions can actually prove of benefit.³ Favorable mutations can actually aid the survivability of a species and can then be maintained by the process of natural selection.⁴

¹ See here, for instance, K. Ravilious, "White-Knuckle Planet," New Scientist (July 16-22, 2005), p. 37.

² Ibid.

³ R. B. Stoughton, "Light and radiation in Relation to Health," Encyclopaedia Britannica (1959 edition), Vol. 14, p. 83; A. U. Desjardins, "Finsen, Niels Ryberg," in *ibid.*, Vol. 9, p. 259; C. & C. Lindholm, "World's Strangest Mental Illness," Science Digest (July 1981), p. 56; D. Warmflash & V. Weiss, "Did Life Come From Another World?" Scientific American (November 2005), p. 69; L. Zhang, et al., "Effectys of Ultraviolet Radiation on Skeleton Development of Broiler Chickens," translated from Scientia Agricultura Sinica (April 2006), pp. 313-317.

⁴ G. H. Jacobs & J. Nathans, "The Evolution of Primate Color Vision," Scientific American (April 2009), p. 58.

Chapter 8

Territorial Infiltrations

STUBBORN ADHERENCE TO FAULTY THEORIES

ot all of science news is revolutionary. We have already shown that the atmosphere of Titan, Saturn's largest satellite, has been compared to that of Earth's primordial one. As reported by Ralph Lorenz and Christophe Sotin:

"In addition to weather patterns occurring on a seasonal cycle and atmospheric replenishment occurring over geologic time, both Titan and Earth undergo climate change over intermediate periods of tens of thousands to millions of years."

So, likewise, in a shorter paper authored by Dennis Overbye where it is stated that the "active weather and geological cycles on Titan" are "analogous to those on Earth."

For that reason, and somewhat understandably, both Lorenz and Sotin, as well as Oded Aharonson, have sought to explain Titan's climatic changes through what they believed had also occurred on Earth. Unfortunately, all three of them, to say nothing of Overbye himself, resorted to a theory that has received a fair share of criticism and not a single shred of validation.

The theory in question is the result of a long line of speculation that goes all the way back to Joseph Alphonse Adhémar in 1842, which concept continued to be expounded by James Croll in 1864, Alfred Wilks Drayson in 1873, and Ludwig Pilgrim in 1904.³ The theory, however, is best known by the name of the Serbian geophysicist who is said to have refined it, Milutin Milankovitch.⁴ What this theory preaches is that the climatic shifts that instigated the world's series of ice ages were brought about by changes in solar radiation due to Earth's axial precession plus its orbital eccentricity and the variation in its tilted angle.

It is disconcerting that, despite its attempted refinement through the years, this particular theory concerning the inception of ice ages was riddled with obstacles from its very inception. This has not only been pointed out by dilettantes, but by recognized authorities within the scientific establishment itself. And yet, as noted above, it continues to be stubbornly adhered to up to the present.

What is even more disconcerting is that the Milankovitch theory is not the only scientifically falsified hypothesis that continues to be propagated. There are various others we will not mention here, but stubborn adherence also happens to burden uniformitarianism.

¹ R. Lorenz & C. Sotin, "The Moon That Would Be a Planet," Scientific American (March 2010), p. 42.

² D. Overbye, "Hints of Earth Splash a Saturnian Moon Landscape," NYTimes.com (July 26, 2010).

³ See D. Cardona, Flare Star (Victoria, British Columbia, 2007), pp. 14-16 for further details.

⁴ *Ibid.*, pp. 16-27, 31, 33, 48, 57, 109, 507.

¹ Ibid.

As is well known, this particular theory owes its popularity to Charles Lyell who was one among various others to take Biblical fundamentalists to task over their derived dates for the creation of the world. Basing his studies on the time it must have taken for cliffs to have eroded to their present demarcations, he came to the conclusion that Earth had to have come into existence some hundreds of millions years earlier than Biblical fundamentalists had been vouching for. Additional to that, he also concluded that, geologically speaking, nothing could have taken place in the past that does not take place at present. What this has meant, and continues to mean, to most of his adherents is that, still geologically and even astronomically speaking, if something is not seen to be taking place at present, it could not have taken place in the past.

ANCIENT DISCLAIMERS

As strange as it may seem to some, uniformitarianism does not owe its origin to modern science. Despite what is to be found in their earlier sources, some of the later Greeks were just as adamant that no changes in the heavens could have taken place in previous ages that were not seen to occur in their own time. This is a verity that has recently been re-stressed by David Talbott and Wallace Thornhill:

"In classical times, the renowned naturalists of Greece and Rome...stood at a critical turn in the evolution of human thought. They frequently expressed skepticism about the extraordinary ideas inherited from more archaic times."

In a somewhat garbled fashion, Plato preserved the memory of the destruction that preceded the Golden Age which, in our scheme, would have followed proto-Saturn's flare-up. And yet he himself knew that, in his day, traditions concerning the days when Kronos, that is Saturn, reigned supreme, had been fragmented. As he tells it: "All these [ancient] stories, and ten thousand others which are still more wonderful, have a common origin; many of them have been lost in the lapse of ages, or are repeated only in a disconnected form..."

Turning to the calamities that plagued Earth in former times, Plato spoke of the resultant "changes" that "would naturally occur" among the beasts of the land. "Hence," he went on, "there necessarily occurs a great destruction of them, which extends also to the life of man; few survivors of the race are left..."

Unfortunately, the real cause having by then been long forgotten, Plato lets his philosophical imagination run wild with absurd theorizing. In a way, he did better in *Timaeus* when he wrote that: "There have been, and will be hereafter, many and divers destructions of mankind, the greatest by fire and water, though other lesser ones are due to countless other causes."

In his later years, however, Plato played an entirely different tune. While he "at first speaks openly of catastrophic disasters," wrote Irving Wolfe, in old age he forbade "the very

¹ D. Talbott & W. Thornhill, "Thunderbolts of the Gods," Chronology & Catastrophism Review (2004:1), incorporating Chronology & Catastrophism Workshop (2004:2), p. 54.

² Plato, *Politicus*, 269.

³ *Ibid.*, 270.

¹ Idem, Timaeus, 22c.

thought of them." Thus, as Livio Stecchini noted, in his final work, "Plato declares that the most dangerous and subversive doctrinaires are those who deny the eternal regularity of the heavenly bodies."

The reason for this was made clear by Thomas Parry when he wrote that: "Plato appears [to have stood] at that time when men were of a strong disposition to deny the oral and written memories of what had once happened by creating rational systems of thought that would provide for them the sense of security and control that they could never have if they continued to believe that the earth was indeed subject to periodic destructive upheavals."

Thus, whereas once Plato had lauded the accuracy of archaic tradition, he later dismissed the same traditions as "little better than nursery tales." This had early on been stated by Giambattista Vico, whom Parry quotes:

"The fables in their origin were true and severe narrations ... But because for the most part they were originally monstrous, they were later misappropriated, then altered, subsequently became improbable, after that obscure, then scandalous, and finally incredible."

Yet even then, as Lynn Rose argues, Plato might not have meant his works as reflections of his own beliefs. After all, Plato's books are all written in the form of dialogues taking place between different parties. It must not therefore be understood, according to Rose, that what Plato placed in the mouth of his protagonists were his true beliefs and/or that he would have defended any of them. "If Plato had wanted all of his writings to be taken literally," wrote Rose, "then presumably he would have written essays and monographs, like Aristotle." There might be some truth in this because, otherwise, why would Plato have decided to place his maxims in somebody else's mouth?

While that may be so—and at this late date we have no way of knowing—the same cannot be said of Aristotle who strongly stressed that "the heavenly bodies alone are so arranged that they ever preserve the same order, and never alter or move from their course..." And, in another work of his, "so far as our inherited records reach," he wrote, "no change appears to have taken place either in the whole scheme of the outermost heaven or in any of its proper parts."

Like Plato, however, Aristotle was no scientist. Worse than that, he repudiated "a wide range of well known, well established observation" that had preceded his own faulty deduc-

¹ I. Wolfe, "A Rage to Deny: The Roots of the Velikovsky Affair," in D. A. Pearlman (Ed.), Stephen J. Gould and Immanuel Velikovsky (N. Y., 1996), p. 626.

² L. C. Stecchini, "Astronomical Theory and Historical Data," in A. de Grazia (Ed.), The Velikovsky Affair (N. Y., 1966), p. 128.

³ T. A. Parry, "The New Science of Immanuel Velikovsky," KRONOS I:1 (Spring 1975), p. 15 (emphasis as given).

⁴ Ibid.

⁵ G. Vico, *The New Science* (1725), as quoted by T. A. Parry, op. cit., p. 3.

⁶ L. E. Rose, from an unpublished manuscript as quoted by I. Wolfe, op. cit., p. 629.

¹ Aristotle, De Mundo, 400a.

² Idem, De Caelo, 270b.



Plato—c. 427-348 B.C.—who seems to have commenced his career as a catastrophist, only to end up as a uniformitarian.

(Illustration by Charles Hogarth.)

tions.¹ Despite the fact that some modern writers have gone out of their way to laud the conclusions reached by Aristotle,² like Claudius Ptolemy, who came after him, he did much to set back the science of astronomy.³ It is not our intention here to set forth the various but faulty theories preached by Aristotle. Charles Ginenthal, however, was not far off when he claimed that Aristotle's theories were presented "without a shred of real substance."¹ Worse still:

"When [Aristotle's] physics was tested by the philosophers who followed him they proved his ad hoc theoretical processes and structures were false and, thus, devoid of a common sense experience of the world. His entire structure was based on sheer abstractions, divined from his theory, and divorced from reality."²

Nor is this merely Ginenthal's opinion. Carl Sagan and Ann Druyan were just as scathing when they wrote that:

¹ C. Ginenthal, "The Aristotelian Cosmos," *The Velikovskian* V:1 (2000), p. 10; see also C. Sagan, *Cosmos* (N. Y., 1983), pp. 182, 184.

² See here, for instance, S. Toulmin & J. Goodfield, The Fabric of the Heavens (N. Y., 1961), p. 93.

³ See, for instance, A. Koestler, *The Sleepwalkers* (N. Y., 1963), p. 58.

C. Ginenthal, loc. cit.

² *Ibid.*, pp. 10-11.



Aristotle—384-322 B.C.—who, through his concept of celestial stability, set the science of astronomy back by centuries.

(Illustration by Charles Hogarth.)

"All of Aristotle's astronomy was predicated on his deep conviction that the heavens were 'free from disturbance, change and external influence...' He believed that the Earth was absolutely stationary in space—as if nailed down."

The later Roman writer Marcus Tullius Cicero was no different. He, too, believed the world to be "stable" and that "it holds together so well for the sake of permanence that it is impossible even to imagine anything more fitted to the purpose." He was therefore adamant that: "In the firmament, therefore, there is no accident, no chance, no aimless wandering, nothing untrustworthy; on the contrary, all things display perfect order, reliability, purpose, constancy..."²

All of which has been brought out here because such statements from the Greek classical period are often used by those who contest past cosmic catastrophes, even though they do so by disregarding all those other chroniclers who held the exact opposite belief. As Stecchini rightly noted in relation to Cicero's adamancy concerning the stability of the heavenly sphere, "this was a reversal of the older beliefs in the Theomachy, or the struggle among the planetary

¹ C. Sagan & A. Druyan, Comet (N. Y., 1985), p. 22 (ellipses as given).

Cicero, De Natura Deorum II: 45: 115.

² Ibid. II: 21: 56.

gods." Writing in the eighteenth century, Pierre Bayle had already recognized such a change in attitude as the result of fear. As Frank Manuel ably noted in speaking of Bayle's conception, "after primitive men had been frightened by cataclysms, a general anxiety gradually pervaded their whole existence..." A similar mindset was advocated by the French philosopher Nicolas-Antoine Boulanger (1722-1738), whose work, very much like that of Benoit de Maillet, was published posthumously. Boulanger, as Trevor Palmer saw fit to remind us, was also heavily convinced that "the human race had been subjected to a series of cosmic catastrophes which had shaped the human mind, causing a deep-seated psychological trauma." Or, as Arthur Koestler rationalized it, the reason behind the negation of past catastrophic events was the very fear of change coupled with the craving for stability and permanence."

RECURRENT FLARES

Fear was predominant, not only during the catastrophes engendered through proto-Saturn's infiltration of the Solar System, but also during untold ages before that. As we have often indicated in previous works, *Homo sapiens* had been cognizant of a peaceful sky prior to proto-Saturn's flare-up. But, as we have also posited, the same proto-Saturn had gone through numerous flares before that.⁶ In fact, it was these recurring bursts that were responsible for the various extinctions of life in the past.

Homo sapiens is the end result of an entire series of now-extinct hominidae, and while he does not seem to have remembered the cataclysms that occurred prior to the Pleistocene epoch, it can hardly be doubted that he must have been traumatized by them, which traumatizations would have definitely affected his evolutionary behavior, as they probably continue to affect him at present.

Whether these previous flares were due to proto-Saturn's passage from one plasma cell into another of different electrical potential, or whether they were due to an intrinsic process that is not presently understood, remains to be seen.

There were, however, also a series of minor flares that occurred due to proto-Saturn's rebounds off the Sun's heliospheric boundary that were responsible for the series of interglacials that punctuated the Pleistocene epoch toward its end.²

HELIOSPHERIC INTRUSION

Although Wallace Thornhill adheres to a slightly different scenario when it comes to proto-Saturn's entry into the Solar System, we are of a mind with him when he speculates that the proto-Saturnian system would have undergone "a long period of increasing acceleration

¹ L. C. Stecchini, "The Inconstant Heavens," in A. de Grazia (Ed.), op. cit., p. 83.

² F. E. Manuel, The Eighteenth Century Confronts the Gods (Cambridge, Massachusetts, 1959), p. 35.

³ Ibid.

⁴ T. Palmer, "The Renaissance of Catastrophism," in I. Tresman (Editor), Quantavolution: Challenges to Conventional Science (Knowledge Computing, 2010), p. 423.

⁵ A. Koestler, op. cit., p. 75.

⁶ D. Cardona, *Primordial Star* (Victoria, British Columbia, 2008), pp. 70, 82-86.

¹ See here, idem, Metamorphic Star (Oregon, 2011), p. 192.

² *Ibid*. pp. 192-193.

from deep space toward the Sun." As he had it stated, this increased acceleration would have occurred because, "like comets," proto-Saturn would have electrically discharged more strongly the closer it came to the Sun. Proto-Saturn's speed, however, would have been slightly dampened by its capture into an ever-closing spiraling orbit around the Sun.

Judging by the manner in which various stellar objects are now known to move through space,² the proto-Saturnian system would probably have also traveled pole-first. This is further evidenced, although not proved, by the present close relationship between the angles of Saturn and Earth's rotational axes, which seems indicative of proto-Saturn and Earth's former axial sharing.

TRANSITIONAL DURATION

One critical question that has been asked concerns the length of time it took the proto-Saturnian system to cover the distance from the Sun's heliospheric boundary to the inner Solar System. If it has only taken the Voyager 1 spacecraft 35 years to reach and exit the heliosphere, why would it have taken the proto-Saturnian system thousands of years to cover the same distance?

Runaway stars are known to be speeding faster than 100 kilometers per second,⁴ which works out to 360,000 kilometers per hour. With Voyager 1's speed at 57,000 kilometers per hour, runaway stars travel over six times faster. Had the proto-Saturnian system been traveling at similar stellar speeds, it should have covered the distance in question in something like five and a half years.

The proto-Saturnian system was not, however, traveling across the heliosphere in a straight line toward the Sun. As already noted, it was traveling around the Sun in an ever-closing spiraling path.

Moving just this side of the Kuiper Belt, the planetoid named Sedna takes somewhere from 12,000 to 10,500 years to complete one circuit around the Sun. This is mainly due to its highly elliptical orbit. Proto-Saturn's ever-closing spiraling path would have been even more complex since it would have brushed against and bounced off the heliospheric boundary time and again before it even crossed the Kuiper Belt. As indicated in the prequel to this work, at best, proto-Saturn's series of plasmaspheric interactions prior to its final flare-up would have taken it only part-way around the Sun.

DECIMATED CULTURES

The lack of artefacts in the archaeological stratum immediately above the one in which relics from the North American Clovis culture have been found in quantity is a good indication that the Clovis Paleoindians must have suffered decimation—since we cannot

W. Thornhill, "The Electric Saturnian System," AEON VI:1 (February 2001), p. 35.

² "Do All Pulsars Fly Pole-First?" Sky & Telescope (September 2000), p. 20; <u>www.universetoday</u> (January 21, 2005); A. MacRobert, "Neutron Stars Flying Pole-First," Sky & Telescope (February 2006), p. 20

³ "Voyager 1 Has Entered a New Region of Space, Sudden Changes in Cosmic Rays Indicate," *American Geophysical Union Release No. 13-11* (March 20, 2013).

⁴ P. L. Gray, "Tracking Orion's Runaways," Sky & Telescope (August 2004), p. 24.

¹ New Scientist (March 20, 2004), p. 15.

rightly claim extermination—due to the catastrophic event that ushered in the Younger Dryas. And yet this, too, has been contested, primarily by the collaboration of two anthropologists, Vance Holliday and David Meltzer.¹

The essence of their dispute was actually summarized in the abstract at the very beginning of their article. As they noted there, they do not contest the claim that "few Clovis sites contain evidence of an immediate post-Clovis occupation," but that "interpreting that absence as population collapse is problematic because the great majority of Paleoindian sites also lack immediately succeeding occupations." What they could not accept is that this lack bespeaks a general decimation of Paleoindians both prior to and following the relatively short-lived Clovis culture.

Throughout their heavily referenced paper, Holliday and Meltzer did not fail to use every excuse they could think of in defense of their own stance. More than that, in their efforts to muddy the waters in order to cloud their opponents' propositions, they even included hypotheses that they themselves did not accept.

One such postulate concerned the supposed adaptive changes these Paleoindians went through due to their having exterminated the animals upon which their subsistence is said to have relied through their extensive hunting.³ And yet, having presented this as a possible reason for what they declare to be an illusory decline of the Clovis culture, they themselves maintain that "there is no compelling evidence to claim the animals' demise had a fatal impact on Clovis groups."⁴

They also accept that "certainly there were changes in the environment over this multicentury span" that led to a reshuffle among the faunal populations and thus to the change in weaponry that took place during this time.⁵ But, once again, they themselves swept this aside by claiming that "the chronological relation" between the change in hunting weapons and the animals being hunted is not only "not secure," but probably "coincidental."

It is not that Clovis tools and weapons went suddenly out of style following the environmental changes in question, but there was definitely a general shift away from them. According to Holliday and Meltzer, however, the lessening amount of retrieved Clovis-style weapons in later deposits can be misleading since many Paleoindian artefacts have been potentially misidentified, misdated, and/or undercounted, while a "large number" of others have "likely" disappeared into private collections without having been "systematically documented or published." And yet none of that really mattered to them because, as far as they are concerned, "no matter how reliable the numbers," artefacts "may not be a valid proxy for past human populations"

¹ V. T. Holliday & D. J. Meltzer, "The 12.9-Ka ET Impact Hypothesis and North American Paleoindians," Current Anthropology (October 2010), pp. 575-607.

² *Ibid.*, p. 575; see also *ibid.*, pp. 579, 580, 581, 584.

³ *Ibid.*, p. 576.

⁴ Ibid.

⁵ Ibid.

¹ Ibid.

² *Ibid.*, pp. 577-578.

³ *Ibid.*, p. 578.

As they next claim, a "somewhat better measure of relative population change" would be "the number of archaeological sites from different time periods." But, once again, not surprisingly, they themselves are of the opinion that even this is "a very blunt instrument," since the assessment of these sites by various archaeologists is "likewise not without bias." It therefore becomes difficult to understand how they can use what they themselves claim to be the biased nature of these archaeological interpretations to show that, contrary to what their opponents claim, what the strata really show is that, "in post-Clovis centuries," there was an increase, rather than a decrease, in population.²

They fare no different when they turn to radiocarbon dating in their attempt to hold on to their particular premise since, according to them, "these approaches" are "problematic" due to "many factors" including the results' reliability. It is "an unfortunate fact," they claim, that very few Paleoindian sites are "precisely dated."

And so it went, one excuse after another, right to the end of their paper.

What Holliday and Meltzer mostly missed—although they really had no way of knowing it—is that the catastrophe that decimated the Clovis Paleoindians was neither the only nor the first of such disruptions. Their misunderstanding here is more than intimated when they continue to claim that their stand holds unless—as they themselves state—there was more than one terrestrial impact.⁵

Of course there was. In that respect, even Richard Firestone, James Kennet, and Allen West, whom Holliday and Meltzer were mainly combatting, were not entirely aware of the entire scope of these catastrophes, let alone their proto-Saturnian source. None of which is to say that any of them would consider a change of mind had they to be made aware of the role proto-Saturn played in these events. On the contrary, they would probably end up being even more vehement in their attempts to contest what to them would appear as a much more outrageous scheme.

THE CIRCUMPOLAR CONTINENT

Marinus Anthony van der Sluijs notwithstanding, the mytho-historical allusions to ancient events that took place at Earth's north celestial pole are so abundantly persuasive that past researchers have understood them as veiled references to a past circumpolar continent. More than that, according to these aficionados, this no longer existing continent was the former site of paradise in which mankind had originated.

One of the most well-known of these enthusiasts was William Warren, once the President of Boston University, who published the results of his research in a slim book, followed three years later by a much more detailed volume. There were, however, others, both before and

¹ Ibid.

² Ibid.

³ Ibid.

⁴ *Ibid.*, p. 579.

⁵ *Ibid.*, p. 580.

¹ W. F. Warren, The true Key to Ancient Cosmology and Mythical Geography (Boston, 1882).

² Ibid., Paradise Found: The Cradle of the Human race at the North Pole (Boston, 1885).

after him, who have ridden this band-wagon, among the most prominent being Jean-Sylvain Bailly and Bâl Gangâdhar Tilak.¹

As with our own reconstruction of these events, this concept did not merely rest on the mytho-historical record. It was also fed by the geologists, glaciologists, and paleontologists who were becoming extremely familiar with the carcasses of prehistoric animals and the remains of mammoth ivory, to say nothing of the vestiges of past near-tropical forests, that were being unearthed in the frozen muck and glaciers of Earth's high Arctic regions.

This puts us in something of a quandary because those mythologists who became convinced of this previous circumpolar continent did so through a misunderstanding. They incorrectly concluded that some, if not most, of the events that the mytho-historical record places in the ancient sky had actually taken place down here on Earth. This is not to be wondered at since ancient nations had themselves fallen into the habit of identifying mythological terrains within the boundaries of the lands in which they finally settled.²

What has been discovered in the high Arctic, however, is a different story. As the paleontologist Alfred Russel Wallace noted at the very beginning of the nineteenth century, the extensive remains of past Arctic life dated to the Tertiary period that had already been discovered during his time prove that "an extensive Palearctic continent then existed."

So, likewise, slightly later, with the geologist Oswald Heer who reached the conclusion that the Arctic fossils dated to the Miocene epoch of the same Tertiary period unequivocally point to a no-longer existing polar continent.⁴ And there were others, among them the well known Arctic explorer Nils Adolf Eric Nordenskjöld,⁵ and the lesser known John Starkie Gardner, who came to similar conclusions.¹

Even so, the circumpolar continent must not be thought of as a former landmass that is no longer in existence. A look at Earth's top polar region easily shows that the present north continental coasts actually curve around the Arctic Ocean and encircle the north pole.

That this polar encirclement is not entirely continuous, with various breaks along its jagged circumference, is due to the tectonic upheaval instigated through proto-Saturn's disastrous flare-up. As the Scottish geologist James Murdoch Geikie noted back in 1881, "a wide stretch of Arctic land, of which Novaia Zemlia and Spitzbergen formed a part, has been submerged." Moreover, still according to Geikie, this submergence has taken place "within a

¹ J-S., Bailly, Histoire de l'Astronomie Ancienne Depuis sons Origine Jusqu'à l'Établissement de l'École d'Alexandrie (Paris, 1781); B. G. Tilak, The Arctic Home in the Vedas (Pune, India, 1893/1903); see also J. Godwin, Arktos: The Polar Myth in Science, Symbolism, and Nazi Survival (London, 1993); V. M. Apte, "Support for the Arctic Home Theory," The Quaterly Journal of the Mythic Society (July 1960), pp. 47 ff.

² See here, for instance, F. Lenormant, "Ararat and Eden," *The ContemporaryRreview* (September 1881), p. 462; M. Eliade, *The Myth of the Eternal Return* (London, 1955), p. 6; R. L. Thompson, *Mysteries of the Sacred Universe: The Cosmology of the Bhagavata Purana* (Alachua, FL., 2000), p. 189.

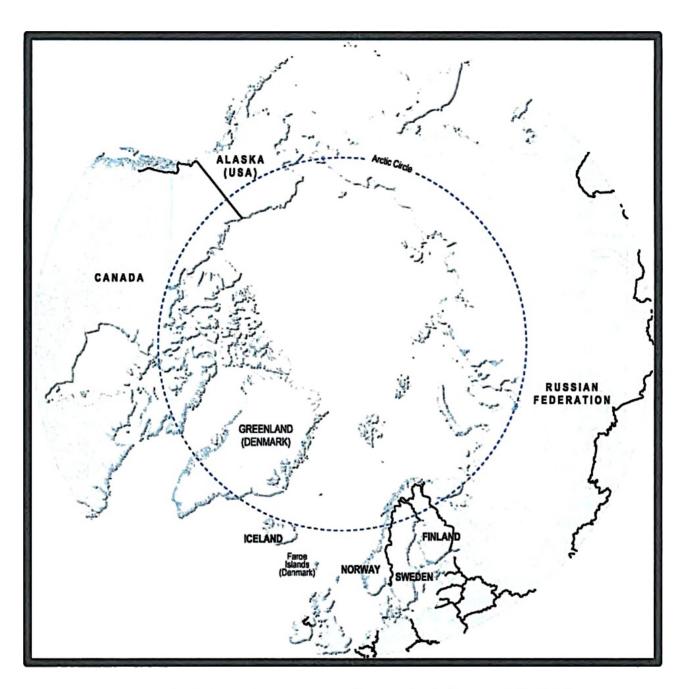
³ A. R. Wallace, *Island Life* (London, 1880), p. 362.

⁴ O. Heer, Flora Fossilis Arctica (Zurich, 1868), pp. 60 ff.

⁵ W. F. Warren, op. cit., pp. 73-74

¹ Ibid., p. 74; see also, J. S. Gardner, "Are the Fossil Floras of the Arctic Regions Eocene or Miocene?" Nature (December 12, 1878), p. 127.

² J. M. Geikie, *Prehistoric Europe: A Geological Sketch* (London, 1881), p. 41.



The continental land areas that presently encircle the Arctic Ocean and North Pole. (Illustration courtesy of UNEP/GRID-Arendal)

comparatively recent geological period."1

Down through the years, different geologists have supplied different theories as to what might have caused this submergence. As far as we are concerned, however, there is little doubt that the lands in question were inundated by the rising water due to the melting of the

¹ Ibid.

glaciated ribbon to the south. Doggerland, discussed earlier, would simply have been but a small portion of this larger circumpolar area.

MAN'S ARCTIC HOMELAND

While, as noted in previous volumes of this series, primitive forms of life might very well have come into being in Earth's high Arctic regions, none of this is to say that man himself originated there. So that, no, we do not hold to the concept that this circumpolar continent was actually paradise. And yet there is no doubt that cultural congregations had settled in those areas long before proto-Saturn's flare-up some 10,000 years ago. This is proven by the telltale remains that have been discovered in areas bordering the Arctic Ocean. To give but a few examples:

The Neanderthals are now known to have been "among the first humans to inhabit Arctic environments." At the time this came to light, it was still believed by most anthropologists that the area in which these remains were discovered had to have been glaciated at the time the Neanderthals had lived there.²

The Bluefish Caves in northern Yukon have yielded a cache of bone tools that indicate the existence of the later *Homo sapiens* in that area as early as 40,000 years ago.³ While this was at the very peak of the Pleistocene Ice Age, it is now known that the region was free of ice during that same period.⁴

Other bone tools, including an incised mammoth tusk that has been dated to over 30,000 years ago, have been discovered in Russia's Arctic regions.⁵

Additional tools, mostly made of stone, similar to the ones left by early hunters in East Africa, have also been unearthed at various sites beneath the present permafrost in Siberia.⁶ Items discovered in the New Siberian Islands that come from Stone Age settlements include bone implements, arrowheads, needles, and axes, mostly fashioned from mammoth tusks.⁷

In Spitsbergen, Norway, which, in our scenario, would have been at the very border of the glaciated region, petroglyphs and pictographs depicting deer and even whales have been found. On the island of Sørøya, off the northern coast of the same Norway, rock carvings that have been dated up to 8,000 years ago have also been discovered. Depicting reindeer, elks and bears, this northern art also includes human figures together with a fishing boat showing a halibut hanging on a line. In Slettness, likewise in northern Norway, arrowheads, knives, and scrapers have come to light together with a cooking pit.

¹ W. R. Leonard, "Food For Thought," Scientific American (December 2002), p. 113.

² Ibid.

³ H. Pringle, In Search of Ancient North America (N. Y., 1996), pp. 15-16, 26.

⁴ *Ibid.*, p. 17.

⁵ "Why Are They Always Older," Chronology & Catastrophism Review (2001:1), p. 36.

⁶ Science Frontiers, No. 92, p. 1, as cited Chronology * Catastrophism Workshop (1994:2), p. 29.

⁷ C. H. Hapgood, The Path of the Pole (N. Y., 1970), p. 102.

⁸ Ihid

⁹ "Stone Age Art Discovered in Norway's North," *National Geographic* (October 1993), Geographica section. ¹⁰ *Ibid*.

All the way from Scandinavia to Siberia, from the Baltic to the Far East, prehistoric rock art illustrates the preoccupation of various ancient cultures, the durability of which is indicated through a pattern of evolution in changing styles and subjects through centuries of occupation.¹

Even in parts of Alaska, which, again in our scenario, would have also bordered the glaciated ribbon, worked flints known as Yuma points have been retrieved from beneath the later frozen muck at very great depths below the surface.²

I could add more, but I think I've made my point.

MASS SOUTHERN MIGRATIONS

The early movement of peoples across northern countries into ones farther south, even across the equator, was not restricted to the Australoids. Similar migrations are known to have taken place into the American continent.

The dating of this American infiltration has been, as it continues to be, debated by various authorities. For quite a while, even up into the twenty-first century, it had been preached that this influx had occurred at the end of the Pleistocene Ice Age.³ Others, however, had determined that man was already in North America before that.⁴ Nor can it be said that all these people passed into the American continent from Asia, including Siberia, even though DNA studies, as well as linguistic ones, have pointed to that particular origin for most of the present North American indigenes.⁵ As other studies have however shown, the DNA lineage of Canada's Ojibwa and related tribal units actually traces to Europeans.⁶

More recently anthropologists from the University of Utah have proposed that this migration could have occurred as early as 25,000 years ago. Although they themselves considered this date "speculative," it remains in keeping with archaeological remains south of the equator, some of which has been dated to 22,000 years before the present, and some much earlier, up to 40,000 and even 50,000 years ago.

¹ A. P. Okladnikov, "The Petroglyphs of Siberia," Scientific American (August 1969), reprinted in Scientific American Offprints, #649, p. 3.

² F. C. Hibben, "Evidence of Early Man in Alaskam" American Antiquity, Vol. VIII (1943), p. 257.

³ M. Fitzgerald, "Portals to Other Realities," The Wall Street Journal at online.wsj.com (September 18, 2010).

⁴ V. Deloria, Jr., Red Earth, White Lies (N. Y., 1995), p. 98; B. Bethune, "Mystery of the First North Americans," Maclean's (March 19, 2001), p. 26; J. M. Adovasio (with J. Page), The First Americans (N. Y., 2002), pp. 214-215

⁵ R. Boswell, "Ancient Words Link Siberia, Canada," Canwest News Service as reported in the The Vancouver Sun (April 3, 2008), p. A11; B. Bethune, op. cit., p. 29. ⁶ Ibid.

⁷ R. Boswell, "Scientists turn Migration Theory on its Head," Canwest News Service as reported in The Vancouver Sun (February 26, 2010), p. B4.

8 Ibid.

⁹ M. Marshall, "Humans May Have reached the Americas 22,000 Years Ago," newscientist.com (April 25, 2013). ¹⁰ A-M, Pessis, "The Chronology and Evolution of the Prehistoric Rock Paintings in the Serra da Capivara National Park, Piauí, Brazil," in M. Strecker & P. Bahn (Editors), Dating and the Earliest Known Rock Art (Oxford, 1999), p. 44.

¹ Science Frontiers (July/August 2004), p. 1.



Arctic hunters entering the north American continent around 10,000 years ago. (Illustration by John Green.)



While DNA has traced most Amerindian tribal lineages to Asians, other DNA studies have linked Canada's Ojibwa people, shown above, as well as a few others from the Great Lakes region, to Europeans.

(Illustration by John Green.)

What all this actually implies, as noted in one of our previous volumes,¹ is that the people who colonized the Americas came in different waves from different places at different times.² In fact, dental studies have indicated that there were at least "three separate prehistoric migrations" into North America,³ one of which would definitely have taken place at the thawing of the glaciers due to proto-Saturn's flare-up at the end of the Pleistocene Ice Age. In fact, as the science reporter Nicholas Wade noted:

"... the concept of a single diaspora is simplistic. People have been migrating in repeated waves down through the millennia ... and every ... populated continent [has] seen multiple invasions and immigrations, the records of which are preserved in every cell in our bodies."

Besides which, can it be positively proven that the influx of peoples into the north American continent actually came from Asia? Or Europe, for that matter? Despite the fact that

¹ D. Cardona, Flare Star (Victoria, British Columbia, 2007), p. 190.

² B. Bethune, op. cit., pp. 27-28 and elsewhere in same article.

³ R. Rudgley, The Lost Civilizations of the Stone Age (N. Y., 1999), p. 40.

⁴ C. Stanford, "A Look at the Entire Human Past," American scientist September-October 2006), p. 473.

DNA links present Amerinds to people in Asia as well as Europe, is it not possible that an original Arctic population colonized all of those three continents?

Despite the fact that DNA studies from remains in central Europe have indicated that modern Europeans stem from around 4,000 B.C., other genetic studies have also clearly shown that most Europeans are related to, if not descended from, Central Asian Stone Age Hunters dated to some 40,000 years ago, with the Basques being "the oldest surviving European group." A second wave of immigrants some 20,000 years later also seems to have settled in Europe from the Middle East.

Near-identical prehistoric artefacts found in northern Europe and North America have led researchers to believe that an ancient culture from Scandinavia must have sailed, or even rowed, across the Atlantic to the North American continent. It is, however, more than probable that the similarity of North American and Scandinavian culture is due to migratory bands from much farther north who ended up settling separately on both continents. As others have noted, once the Arctic glaciers melted, areas that had been "abandoned during the glacial maximum were recolonized" by both animals and people.⁵

EXODUS NORTH

The early southern migrations we have been discussing have been debated since the nineteenth century. One of the earliest among these debaters was the botanist Gaston de Saporta. Although some of the evidence he presented did not hold up through the years, what had already come to light toward the end of the nineteenth century was already enough to convince him that these migrations had to have stemmed from what he termed a "mother-region." And although, according to him, that region was "still undetermined," he had no doubts that it had "to have been in the North," from where humanity "radiated in several directions."

One aspect concerning which de Saporta was *entirely* wrong was his insistence that *all* of man's prehistoric migrations "have been constantly from North to South." While there are those who continue to believe that Early Neolithic peoples spread into Europe from the north, newer evidence clearly indicates that European tribal units actually migrated northward especially into lands that became available once the northern ice began to thaw toward the end of the Pleistocene.

This northward movement of peoples across Europe received additional impetus from DNA (deoxyribonucleic acid) studies, something that was entirely unknown in de Saporta's time. He had no way of knowing that traces of this genetic molecule would allow a new branch of

¹ P. Rincon, "Making of Europe Unlocked by DNA," bbc.co.uk (April 23, 2013).

² "A FewGood Men," New Scientist (November 18, 2000), p. 25.

³ P. Standring, "Eve's Seven Daughters," Chronology & Catastrophism Review (2001:2), p. 49

⁴ "A Few Good Men," see above.

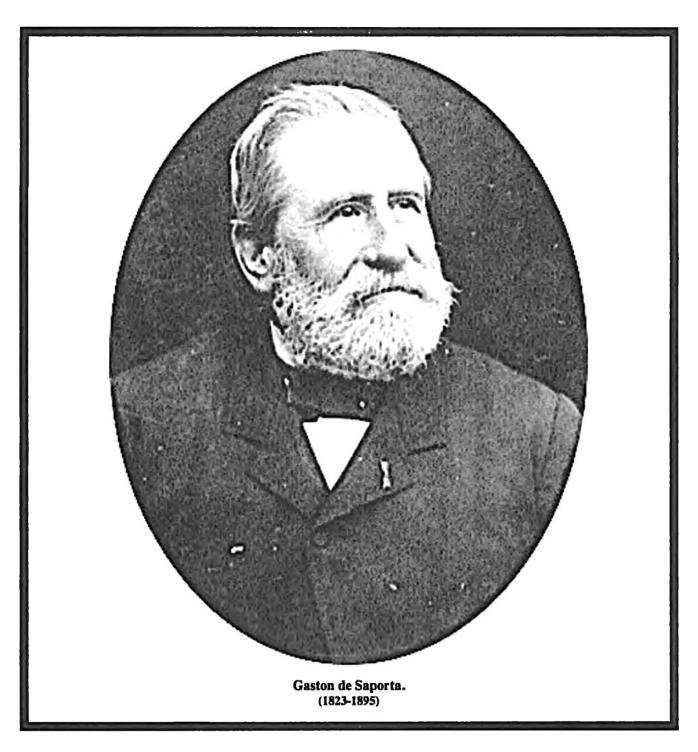
⁵ J. McIntosh, Handbook to Life in Prehistoric Europe (Oxford, 2006), p. 23.

⁶ G. De Saporta, "How the Earth Was Peopled," Popular Science Monthly (October 1883), p. 753.

 $^{^7}$ $\it Ibid.$

⁸ C. Perles, *The Early Neolithic in Greece* (Cambridge, 2001), p. 60.

⁹ J. M. Adovasio, op. cit., pp. 229, 257.



science, now known as archaeogenetics, to trace the lineages of entire populations across vast distances and time. These studies have now validated the northward migration of entire European populations at the end of the Younger Dryas period.¹

¹ C. Renfrew, "Archaeogenetics—Towards a 'New Synthesis'?" Current Biology (February 23, 2010), p. R164.

An entirely different study that concerned itself with languages came to the same conclusion. Led by the evolutionary biologist Mark Pagel, British researchers have ably demonstrated that the languages presently spoken by billions of people across both Europe and Asia "are descended from an ancient tongue" that was common "in southern Europe." Although this original language is said to have been around since 15,000 years ago, it apparently did not spread into northern Europe and Asia until "the end of the last ice age" when "the ice sheets were retreating." In the end, this resulted into languages that are now "spoken all over Eurasia, from Portugal to Siberia," with "vocabularies as varied as English and Urdu, Japanese and Itelmen, a language spoken along the north-eastern edge of Russia."

This northward migration, however, might not only apply to Europeans. Although little is known about the North American people who lived in what is now the state of Indiana 10,000 years ago,² there is a "growing notion" that they, too, migrated northward in the wake of the Pleistocene Ice Age.³

CAUSE AND EFFECT

Tremendous climatic changes around the world have accompanied the slow inception of ice ages throughout time as well as their relatively sudden end. This had been known for many years, but, with the progress of excavation in the affected regions, despite those who have continued to combat it, the accumulated evidence has validated its cause as having been cosmically induced. As it was reported at the very time this book was being written:

"Research published in the Proceedings of the National Academy of Sciences finds evidence of a major cosmic event near the end of the Ice Age. The ensuing climate change forced many species to adapt or die."

Exactly what this cosmic event was, these researchers claim, remains "unclear," even though they were still opting for cometary, asteroidal, or meteoric splinters. Since, to us, the event in question was proto-Saturn's flare-up, it comes as no surprise that research now indicates it to have been severe enough to have "scorched the air, melted bedrock and altered the course of Earth's history."⁵

That this was more of a direct cosmic blast than the showering of minor discharges from splintered cosmic bodies is evidenced by the nature of the much disputed molten spherules that have been retrieved from the Younger Dryas Boundary. As those who are themselves concerned with their validity have noted, these spherules have been well analyzed and compared to similar ones that have been produced by atomic explosions such as the 1945 Trinity detonation in New Mexico.¹ This, alone, should have told the researchers that the Ice

¹ I. Sample, "European and Asian Languafes Traced Back to Single Mother Tongue," guardian.co.uk (May 6, 2013).

² "Ancient Bone Tool Sheds Light on Prehistoric Midwest," sciencedaily.com (October 22, 2008).

³ Ibid.

⁴ T. Robinette, "The Mammoth's Lament: UC Research Shows How Cosmic Impact Sparked Devastating Climate Change," eurekalert.org (May 20, 2013).

^{&#}x27;Ibid.

¹ J. H. Wittke, "Evidence for Deposition of 10 Million Tonnes of Impact Spherules Across Four Continents 12,800 Y[ears] Ago," pnas.org (April 9, 2013), p. 2.

Age terminating blast had to have been something much more powerful than minor discharges from cosmic debris. Proto-Saturn's radiant flare-up would have more than filled the bill. As if to clinch the matter, it has more recently been established that, to this day, Saturn remains much brighter than expected for a planet of its supposed age.¹

¹ "Scientists Reveal Saturn's Youthful Appearance is the Result of Layered Convection," scitechdaily.com (May 1, 2013).

Chapter 9

Plasmatic Discharge

RELOCATIONS

Younger Dryas, that we discussed in the previous chapter, were mainly driven by a desperate attempt to flee from Earth's cosmic bombardment and its associated tectonic upheavals. That the survivors of these cataclysms would have attempted to seek safer havens need no longer be stressed. Fear and safety were not, however, the only motives that set them scouring for new terrains. Tribal units that had abided just north or south of the glaciated ribbon were not disinterested in what lay beyond the thawing edges of those previous barricading glaciers. There were, however, also those farther south who were driven northward due to their having been captivated by the glorious transformations that were occurring in the sky.

What were these transformations?

STELLAR EMISSIONS

As we described in the prequel to this work, due to the dust that proto-Saturn released through its glorious blinding flare-up, a great part of which also ended up enveloping Earth, the dwarf sun's radiant disk would have been temporarily obscured.

Once the dust dispersed, it became obvious that proto-Saturn had changed its appearance, which transformation led to the belief that the god had given birth to himself as a new and younger deity.

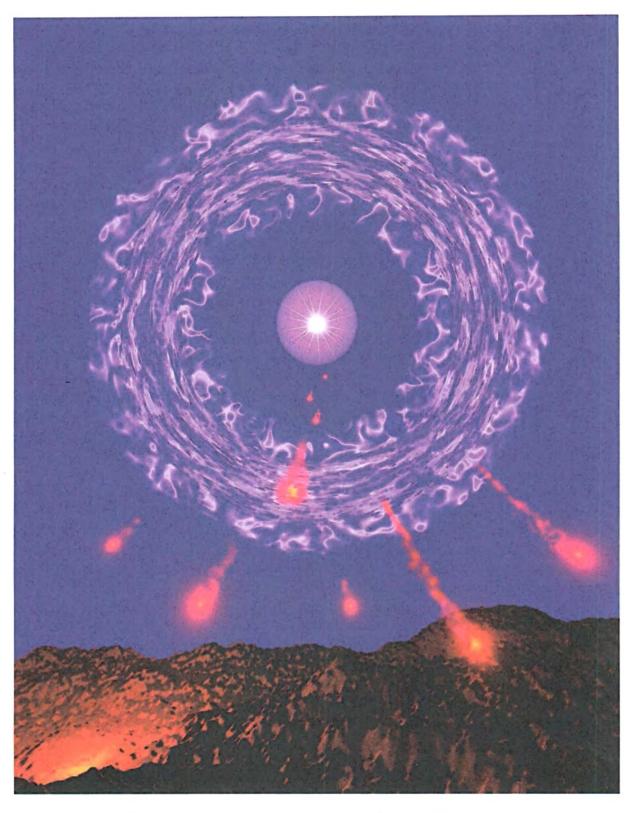
Among these transformations was proto-Saturn's drastic change in hue. Due to the intense ultra-violet radiation it emitted through its flare-up, its disk was seen to have turned a vivid purple, which color had no name in any of the existing languages and thus came down to us through the ages mainly as blue-black.

Additional to that, having rid itself of a considerable amount of material, proto-Saturn suffered a severe reduction in its mass. This resulted in a lessening of its density and, together with its drift into the Solar System's area of different electrical potential, it ended up in a change of its apparent size. Under these combined conditions, proto-Saturn was seen to bloat.

The dwarf-sun's circumstellar disk, on the other hand, was reduced in size since proto-Saturn's super flare-up scattered most of the detritus it had contained. The disk therefore shrank, narrowing its band, lessening its intensity, and clearing a wide gap between its diffuse inner edge and its central shining orb.

At this point it should be noted that the fast dissipation of circumstellar disks is no longer the controversial subject it used to be. On the other hand, it should also be pointed out that

¹ D. Cardona, Metamorphic Star (Oregon, 2011), pp. 209 ff.



An ideal view of the thinned-out circumstellar disk around proto-Saturn following its flare-up (Illustration by Richard M. Smith.)

these disks do not necessarily require their host to flare up in order to dissipate.

Up until the advent of the twenty-first century, it was still believed that circumstellar disks needed "hundreds of thousands, if not millions of years" to dissipate. In 1983, such a disk had been discovered around a young star in the Scorpius-Centaurus stellar nursery. Nothing had changed by 2008 when the star was surveyed again. And yet, a year later, the dust contained within the disk had diminished by about two thirds. Worse still, by 2010, the dust had just about completely disappeared.²

It is not known exactly where all that dust had gone to. Some were of the opinion that it might have been sucked back into the star. Others thought that the star could have spat it out, expelling it from its orbit.³ It is thus obvious that there is more than one method through which circumstellar disks can suddenly disperse.

Back to the aftermath of the proto-Saturnian flare-up, however, the most bizarre sight that was witnessed by our ancient forefathers, once the blinding light had ebbed enough for the developing heavenly manifestations to be clearly seen, was a fiery stream of matter that was spewing from proto-Saturn's south polar region in an ever widening spiraling path.

At this point it will have to be assumed that an equal amount of material was also dispelled from proto-Saturn's north polar region since, in keeping with plasma physics, such ejections are known to be bipolar. Due to Earth's axial location directly beneath proto-Saturn's south pole, however, this northern discharge would not have been visible to Earth-bound eyes.

This dual ejection is borne out by the expulsion of material by discharging stars. And since proto-Saturn flared up more than once in its cosmic career, it can actually be compared, even if on a much smaller scale, to a recurring nova. Recent studies of such a recurring stellar outburst, the one known as RS Ophiuchi, indicates this rather well since its discharge of material came from both its axial poles.⁴

Although there was a time when such spiraling stellar outpouring would have been deemed highly unlikely, discoveries with improved viewing equipment in the twenty-first century revealed that such outbursts were a cosmic reality. The Hubble Space Telescope captured such material spewing forth in a spiral from the star LL Pegasi, while the Atacama Large Millimeter/submillimeter Array—ALMA for short—spotted another spiral structure issuing from the star R. Sculptoris.

There is no sense in pointing out that the proposed causes of these formations by astrophysicists differ from the one supplied in relation to proto-Saturn's outburst. For one thing, they also differ from one another. Even so, it is not here being claimed that such structures can only come about through stellar flare-ups anymore than the dissipation of circumstellar disks, as noted above, can only result through similar means.

One thing we shall definitely stress is that the spiraling matter that was seen being ejected from proto-Saturn was for ever after held responsible for the inception of Creation.

¹ B-A, Parnell, "Disappearing Space Dust Belt Baffles Boffins," theregister.co.uk (July 5, 2012).

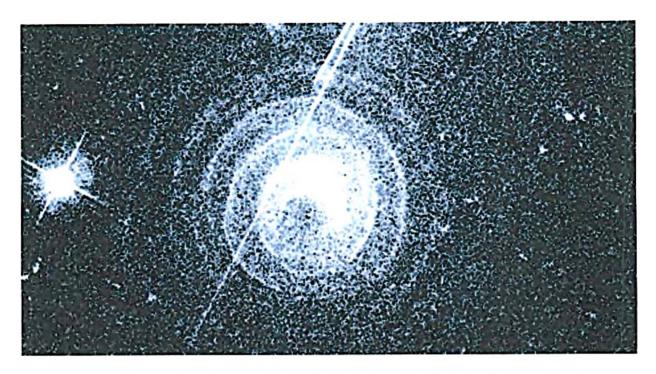
² Ibid.

³ Ibid.

⁴ S. Starrfield, et al., "Prelude to Disaster," Sky & Telescope (October 2009), p. 30.

⁵ R. Sahal, "An Extraordinary Celestial Spiral." spacetelescope.org (September 6, 2010).

⁶ K. Schmidt, "Surprising Spiral Structure Spotted by ALMA," eso 1239—Press Release (October 10, 2012).



The spiral issuing from the star LL Pegasi as viewed through the Hubble Space Telescope. (Photograph courtesy of ESA/NASA.)

THE CREATIVE SPIRAL

As recounted in one of the books of the Old Testament, God asked Job, whose faith he was testing, a telling question. "Where wast thou," he asked, "when I laid the foundation of the earth?" To which he added, "declare [it], if thou hast understanding."

In analyzing this particular verse, Edward Greenstein, a professor of Biblical interpretation, found reason to stress that, naturally enough, that question could not be answered because "neither Job nor any other person bore witness to that grandest of all events."

Since by "that grandest of all events" Greenstein meant the formation of Earth, he was entirely correct. Those who have otherwise understood the verse in question as alluding to Creation in a general sense are entirely wrong since, as we have already intimated, man did witness God's Creation. Not only that, but, as we had pointed out in a previous work of ours, it was the very spiral we have been discussing that was universally believed to have been responsible for whatever it was that God had supposedly created. As Jill Purce correctly noted, the mesmerizing influence this symbol had on ancient man was due to the belief that "chaos" had turned into "cosmos" through a "spiral movement." Or, as Marinus van der Sluijs

¹ Job 38:4.

² Ibid.

³ E. L. Greenstein, "When Job Sued God," Biblical Archaeology Review (May/June 2012), p. 57.

⁴ D. Cardona, op. cit., p. 269.

¹ J. Purce, The Mystic Spiral: Journey of the Soul (London, 1974), p. 29.

phrased it: "The 'beginning point' of creation is frequently portrayed in close conjunction with the creative spiral of chaos." And, more than that, quoting from a work by Lama Anagarika Govinda, van der Sluijs touches on the Vedic belief that the seed of what is often erroneously termed "the universe" manifested as a spiral issuing from the centre of a sphere, which is an apt description of what was really witnessed.

One additional feature of the spiral that should be noted is the manner in which various cultures depicted its radiating streamers through the use of short projections around its periphery. Petroglyphs and pictographs—patterns incised or painted on rock surfaces—are among the ways in which ancient peoples from around the world preserved the memories of what they had witnessed and/or wished to pass on to their descendants. In a way, these were no different than present-day photographs. The similarity of the patterns our ancient forebears found reason to depict around the entire world bespeak the near-accuracy of their recollection.

THE SPIRALING RIVER

Proto-Saturn's spiraling emission was also visualized by various groups as a river issuing out of the mouth of the Creator. As William Foxwell Albright noted, "according to an ancient idea, there was a mighty river, whence all streams spring, the nara banat kalamu, 'river, creatress of everything,' corresponding to the Sumerian goddess Engur, ama u-tud an-ki, 'mother who bore heaven and earth'." This belief, that the river goddess (or god) created "everything," was quite strong among the Babylonians.

In following Albright, we next learn that the goddess Engur was also referred to as Hubur, who was likewise known as the "river of fertility." But that Hubur/Engur was additionally interchangeable with the Akkadian apsu, the same as the Sumerian abzu, is not accepted by the present author. On the contrary, the apsu/abzu was, in our opinion, the mytho-historical celestial ocean, understood as the circumstellar disk surrounding proto-Saturn, that was invaded by the celestial river under discussion. This was the same fog or foam that was described by the Yuki Amerinds of California as having "moved round and round continually" over the water.

As we have already shown in the prequel to this volume, the ancient Egyptians venerated the river Nile as the god Hapi. Like Engur and Hubur, however, Hapi was originally a celestial river that was believed to have been "the creator of things which exist," and, more than that,

¹ M. A. van der Sluijs, *Traditional Cosmology*, Volume One (London, 2011), p. 124.

² L. A. Govinda, Foundations of Tibetan Mysticism (London, 1959), pp. 62, 64.

³ M. A. van der Sluijs, op. cit., p. 126.

⁴ W. F. Albright, "The Mouth of the Rivers," The American Journal of Semitic Languages and Literatures (July 1919), p. 166.

⁵ Idem., Yahweh and the Gods of Canaan (N.Y., 1968), p. 92.

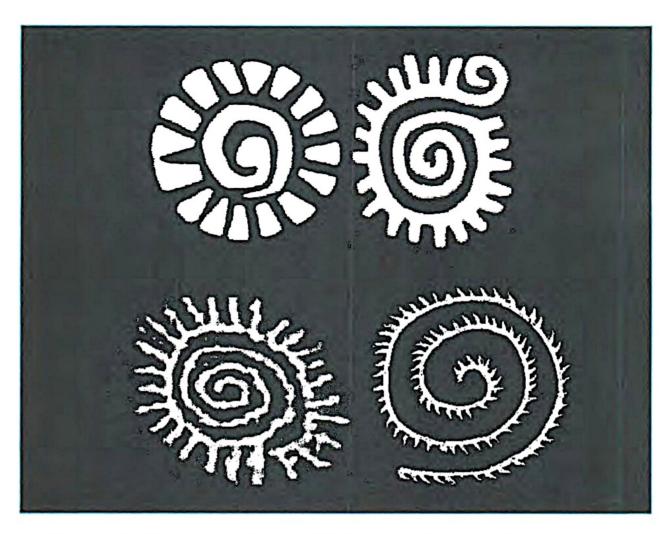
⁶ Idem., "The Mouth of the Rivers"—see above—p. 167.

⁷ Ibid.

⁸ See her, D. Cardona, op. cit., pp. 121-122, 254, where other references are supplied.

⁹ M. A. "Rens" van der Sluijs, "The Sun Man," Chronology & Catastrophism Workshop (2013:1), p. 31.

¹ D. Cardona, op. cit., p. 302.



The manner in which ancient cultures depicted the radiating nature of proto-Saturn's emitted spiral.

Top row: Copies of Mexican pictographs.

Bottom row-left to right: Copies of petroglyphs from North America and Egypt.

the actual "Father of the gods."

In relation to that, and according to the Latin writer Apuleius, who was born a Numidian Berber, water in an urn was used as a representation of Osiris.² Such urns were consecrated to him "as the life-giving water-god—the Nile."³

In Ghana and the Ivory Coast of Africa, the river Tano is not only considered "one of the most important deities," but, as the son of the supreme god, to have actually been responsible for Creation.¹

In the meantime, the belief that terrestrial rivers owed their origin to celestial ones, and more directly to Saturn, was not unique to ancient Egypt. The same is said of the Indian river

¹ E. A. W. Budge, The Gods of the Egyptians, Vol. II (N. Y., 1904/1969), p. 46.

² F. T. Elworthy, *The Evil Eye* (N. Y., 1895/1971), p. 301.

³ Ibid.

¹ G. Parrinder, African Mythology (London, 1967), p. 86.

Ganges. Originally, the Ganges was not only said to have *only* "washed" the sky, but, as the goddess Ganga, to have circled the city of Brahma, whose identification as Saturn we need not repeat.

THE RIVER OCEAN

Various commentators who have striven to clarify many of the topics we have been discussing, and will continue to discuss, have been trapped by the symbology behind those topics, including the very language with which they are described. Among these topics we often run headlong into what the mytho-historical record usually renders as "the encircling ocean" that is often understood, and thus presented, as an actual ocean surrounding the newly created Earth.

In the Latin version of the Apocalypse of Paul, which is different from the Coptic work of the same name that was discovered in the Nag Hamadi library,³ the Apostle Paul is described as being taken on a tour of heaven by an angel. Paul is later made to narrate the events and the sights he witnessed and, at one point, he states the following:

"And I set out with the angel and he brought me towards the setting of the sun, and I saw the beginning of Heaven, founded on a great river of water, and I asked: 'What is this river of water?' And he said to me: 'This is the ocean which encircles the whole earth'."

Notice that, in the above, the "ocean" is described as a "river of water," which could not, then, be the ocean as we know it. And, in fact, elsewhere, the Apostle Paul is also made to state:

"And he [the angel] set me upon the river whose source springs up in the circle of heaven, and it is this river which encircleth the whole earth. And he says unto me: 'This river is Ocean'."⁵

And there, in effect, we have it. Given that Okeanos was the origin of the English word "ocean," mythologists have often been guilty of confusing the Greek name of the mythological encircling river with the present terrestrial ocean. As to where came this notion, we have not far to seek.

In Hesiod's *Theogony* it is told how Gaea and Uranus begot a son who is there described as "deep-whirling Okeanos." Elsewhere in the same epic poem Okeanos is described as a "circling stream," the stream itself being alluded to as that "of famous Okeanos." According

¹ J. Herbert, "Hindu Mythology," in "India: The eternal Cycle," Larousse World Mythology (London, 1972), p. 221.

² V. Ions, *Indian Mythology* (London, 1967), p. 109.

³ W. Barnstone, (ed.), *The Other Bible* (San Francisco, 1984), p. 538.

⁴ *Ibid.*, p. 542.

⁵ W. F. Warren, *Paradise Found* (Boston, 1885), p. 261.

¹ Hesiod, Theogony, 116-146

² *Ibid.*, 209-242.

³ *Ibid.*, 271-299.

to Homer, it was this stream called Okeanos that girdled the world.¹ Robert Graves then tells us that "Homer's myth is a version of the Pelasgian creation story in which the role of Okeanos (also rendered Oceanus) was played by Ophion.²

Although the Sicilian-born Greek Historian, Diodorus Siculus, misunderstood the nature of Okeanos, he was correct in his report that, to the Egyptians, it was the same as the river Nile³ since, as we have already seen, the original Nile was a celestial entity. He was also correct in reporting that, to the same Egyptians, it was within this river that the gods had been created.⁴

The origin of the *name* Okeanos seems to have been the Akkadian *uginna* which, aptly enough, means "circle." Is not that what is meant when Homer describes Okeanos/Oceanus as "the ever-encircling waters" or, as others have translated the verse in question, as "bending back in a circle." But what does it mean that this river-god "girdled the world" or that "with nine swirling streams he winds about the earth"?

THE CELESTIAL EARTH

As we noted at the very beginning of this volume, there is probably not a race or nation on Earth that has not preserved a myth recounting the creation of what mythologists and theologians have termed "the earth," "the world," or, worse still, "the universe." What is not universally realized by most mythologists is that these terms are mostly due to confusion that has mainly risen through the ancients' own deficiency in reporting what their own forefathers had claimed to have seen developing in Earth's primordial sky. What we have also noted is that the mytho-historical record makes it quite obvious that man was a witness to whatever it was that he saw being created. That this could not have been the world upon which he trod need not be re-stressed. This has led most mythologists to claim that the tales of Creation that one encounters in the mytho-historical record cannot really be historical. Derek Douglas made this clear when he wrote the following:

"If the events referred to really described the initial formation of the Earth then it would be impossible for them to be true historical records in any normal sense since there could be no question of man being around at the time."

What, then, was this "earth" that man saw being created? Roger Ashton, who knew the answer, sought to admonish future researchers not to seek mythic creation in matters

¹ R. Graves, *The Greek Myths*, Vol. I (Harmondsworth, 1964), p. 30.

² Ibid.

³ Diodorus Siculus, Bibliotheca, I:12.

⁴ Ibid.

⁵ G. S. Kirk, et al., The Presocratic Philosophers (Cambridge, 1957/2003), p. 12.

⁶ Homer, *Iliad*, XVIII: 395-409.

⁷ G. de Santillana & H. von Dechend, Hamlet's Mill: An Essay on Myth and the Frame of Time (Boston, 1969), p. 273.

⁸ Hesiod, op. cit., 787 ff.

¹ D. Douglas, "Some Theological Implications of Catastrophism," SIS Workshop 4: 1 (July 1981), p. 34.

terrestrial. "Any effort to trace mythical themes backwards to their origins reveals a *celestial* basis." To which he added:

"...cause for finding anything earthly in myth will melt away into nothing. The 'earth' of myth has the attributes of a celestial object."²

The validity of this pronouncement is indicated by a passage in the Egyptian Pyramid Texts. "The earth," it is there stated, "is raised on high," even though "beneath the sky." Likewise, the Indic Rig Veda describes the holding up of the "earth" as well as "heaven." As Ashton pointed out, an "earth" held up together with "heaven" has to be a celestial "earth." The very language of the Rig Veda retains a hint of this state of affairs in the name Ila, which means "earth," but also "heaven." Even the Pygmies of the Ituri Forest "speak of a celestial world." Thus, whatever can be said of the mythical "earth" can similarly be said of the mythical "heaven," as Milton Zysman ably understood when he wrote:

"However imperfectly our forefathers transmitted their description of heaven, it was not the boundless expanse of space that we see today. So pervasive was the concept of some kind of structure housing the gods that we today assume it to be a religious convention."

The irony is that Zysman does not subscribe to the Saturnian scenario that is here being analyzed, and yet the point he himself stressed in the above can be aptly illustrated through Saturnian lore. Thus, for instance, we find that Saurikah, which is one of the Sanskrit words for "heaven" and/or "paradise," is also a name for the planet Saturn.⁹

The Soochow Astronomical Chart, from China, couples the planets with the five elements. The element earth is there linked with T'ien-Hsing, which is the Chinese name for Saturn.¹⁰ This is quite interesting because the ancient Egyptians seem to have indulged in a similar practice. Thus one of the Egyptian words for the same element is set.¹ But the god of the same name, although written with different hieroglyphs, was associated with and even unconditionally identified as Saturn, as so, also, was Typhon with whom the Greeks identified Set.²

¹ R. Ashton, "The Incredible Theme," unpublished manuscript in author's possession (November 26, 1983), p. 1 (emphasis added).

² Ibid.

³³ Pyramid Text 1405.

⁴ Rig Veda I:154:4.

⁵ R. Ashton, "The Polar Planet," unpublished manuscript in author's possession (February 1984), p. 3.

⁶ V. S. Apte, The Practical Sanskrit-English Dictionary (Delhi, 1965), p. 244.

⁷ J-P Hallet (with A. Pelle), Pygmy Kitabu (N. Y., 1973), p. 212.

⁸ M. Zysman, "Saturn Myth—A Challenge to the Planetary Hypothesis," Kataklysmos (May 19, 1987), p. 6.

⁹ V. S. Apte, op. cit., p. 1002.

¹⁰ W. C. Rufus & H. Tien, The Soochow Astronomical Chart (Michigan, 1945), p. 23.

¹ E. A. W. Budge, An Egyptian Hieroglyphic Dictionary, Vol. II (N. Y., 1920/1978), p. 627.

² W. A. Heidel, *The Day of Yahweh* (N. Y., 1929), p. 456; M. O. Howie, *The Encircled Serpent* (N. Y., 1955), pp. 64-65.

As Max Müller brought to the attention of his readers as far back as 1870, descriptive words and metaphors would have lost their precise meaning when passed on to those who had not witnessed whatever it was that was being described to them. An even greater difficulty involves the translation of texts that are written in languages that are no longer spoken. Giorgio de Santillana and Hertha von Dechend brought this home when they wrote:

"Most of the texts [from which mythological information is presently derived] were written—if they were ever originally written—in remote and half-obliterated languages from the far past. The task of translation has been taken over by a guild of dedicated, highly specialized philologists who have had to reconstruct the dictionaries and grammars of these languages. It would be bad grace to dismiss their efforts, but one must take into account several layers of error."

In discussing forms of thought that were entirely different from our modern usage as they appear in ancient languages, the above-named authors used the Egyptian hieroglyphic language as an example by pointing out that, in that language, the simple word "heaven" possesses thirty-seven different terms.³

So, similarly, with Indic texts which, as Müller pointed out, contain twenty-one names for the word "Earth." Not surprisingly, in that language, *urvi* does not only mean "Earth," but also "river," while *Prithvi*, which is also one of the names of Earth, has the additional meaning of "sky." 5

Even van der Sluijs could understand that "in most cases, the issue is not really a case of misunderstanding the word for 'earth', but of the difficulty to describe a distinct circumscribed area in near-earth space that is no longer visible."

This caused so much confusion among those who had not witnessed the primordial events we are here discussing that the distinction between Earth and sky, or heaven, eventually turned into an ambiguity. Hence, Persian lore asserts that "the sky is arranged above the earth" but also "below the earth." For the sky to have been both above and below the "earth," the "earth" itself must have been in the sky. This is verified by the same source when it speaks of "the semblance of the earth, in the midst of the sky" or "the earth within the sky." To some Indians in Peru, heaven was referred to as the world above. So, also, with the Iroquois Amerinds. What they referred to as "earth" in myth turns out to be the dome of the sky.

¹ M. Müller, Chips from a German Workshop, Vol. II (N. Y., 1870), p. 72.

² G. de Santillana & H. von Dechend, op. cit., p. 72.

³ *Ibid.*, pp. 72-73.

⁴ M. Müller, loc. cit.

⁵ Ibid.

⁶ M. A. (Rens) van der Sluijs, "What on Earth ...?" thunderbolts infoltpod (February 15, 2010, repeated on August 20, 2010) emphasis added.

⁷ E. W. West, *The Sacred Books of the East*, as quoted by A. B. Cook, *Zeus: A Study in Ancient Religion*, Vol. 11, Part II (N.Y., 1965), p. 1036.

¹ Ibid. (emphasis added).

² J. G. Frazer, The Golden Bough, Vol. II (N.Y., 1890/1981), p. 118-119.

³ R. Van Over, Sun Songs: Creation Myths From Around the World (N.Y., 1980), p. 72.

Quiche Maya word for "world" translates as "earth-sky." 1

Are we here implying that what man saw being created in the sky was the planet Saturn? Not quite. What ancient man really witnessed was the series of *transformations* that the proto-Saturnian sun went through once the blinding light of its flare-up had dissipated. Prime among those transformations was the spiraling stream of fiery debris that we have been discussing.

TAMMUZ

At this point it seems judicious to introduce a deity we have deliberately avoided up to this point. The divinity we have in mind is the Mesopotamian Dumuzi, more popularly known as Tammuz, whose identification has for long proved problematic.

Referring to Tammuz's mythological allusions as "a knotted story" that still needs to be untangled, de Santillana and von Dechend readily understood that it is considerably hampered by too many identifications that have been zealously taken for granted by scholars. As they ended up saying: "Actually, it is not known yet who Tammuz is." So, similarly, with Bendt Alster when he wrote that a "considerable number of attempts have been made to define the character of the god, but the results so far have failed to carry conviction." Ev Cochrane called it "one of the most intriguing problems in ancient Near Eastern Studies."

Stephen Langdon was of the opinion that Tammuz had originally been a human king that was later deified⁵—and he was not the only one who held to that belief.⁶ In keeping with the deity's mythological character, others felt confident in merging him with various other divinities, among whom one can name Adonis, Attis, Balder, Osiris, Yama, and Yima.⁷ Some came closer to the truth by seeking the deity's identity among the stars in heaven with a tossup between Sirius and Orion.⁸ A few came even closer by zeroing on a planet, although it remained uncertain whether the planet had originally been Mars or Saturn.⁹

Before the above is judged a chaotic mess, we need to ascertain the *original* identity of Tammuz. So let us, first and foremost, turn to the meaning behind his name.

Langdon tells us that Tammuz's original designation was Dumuzida in which *dumu* stands for "son" and *zid* stands for "faithful" and/or "true," but also "breath of life." Most mythologists, including Langdon himself, have thus taken the name to mean "faithful son." But whose son was he?

¹ E. C. Krupp, Beyond the Blue Horizon (N.Y., 1991), p. 42.

² G. de Santillana & H. von Dechend, Hamlet's Mill: And Essay on Myth and the Frame of Time (Boston 1969), p. p. 285.

³ B. Alster, *Dumuzi's Dream* (Copenhagen, 1972), p. 9.

⁴ E. Cochrane, "The Star of Dumuzi," AEON V:3 (December 1998), p. 63.

⁵ S. H. Langdon, Semitic Mythology, Volume V of The Mythology of All Races (N. Y., 1931/1964), p. 341.

⁶ E. Cochrane, Starf*cker (Ames, Iowa, 2006), p. 28.

⁷ S. H. Langdon, op. cit., p. p. 76; H. Collitz, "König Yima und Saturn," Oriental Studies in Honour of Cursetji Erachji Pavry (London, 1933), p. 88; G. de Santillana & H. von Dechend, loc. cit.

⁸ E. Cochrane, "Heracles as Cross-Dresser," AEON VI:4 (August 2003), p. 52.

⁹ G. de Santillana & H. von Dechend, loc. cit.

¹ S. H. Langdon, op. cit., p. 342.

² Ibid.

The god's more correct Sumerian name, however, was Dumu-zi-abzu and Albright, among others, understood the *abzu* as a reference to the underworld in which Tammuz was believed to have been born. This underworld had for long been presented as having been a watery one, which made James Frazer allude to Tammuz as the "true son of the deep water." This was further clarified by Albright by rendering the meaning of the god's name as "the faithful son of the subterranean fresh-water ocean."

We can, however, forget about both the underworld and the subterranean ocean since the abzu—variant Apsu—was the celestial ocean that, in our unfolding scheme, is identified as the circumstellar disk that originally surrounded the proto-Saturnian sun.⁴ As Albright himself tells us, the abzu was the home of Ea,⁵ whose identification as proto-Saturn we have formerly indicated in great detail.⁶

In the meantime, that the proto-Saturnian deity was said to have been born—actually reborn—in the celestial ocean need not be re-stressed. And, in order to further exemplify the Saturnian identity of Tammuz, we include his other names, Ningirsu⁷ and Ninurta, both of which were aliases of the proto-Saturnian deity.

Tammuz was also identified with Shamash, ¹⁰ whom, unfortunately, most mythologists continue to misrepresent as the present Sun despite the ancient's own testimony to the contrary. ¹¹ In verification of this, we point to a Sumerian seal that shows a worshipper between the goddess Ishtar and Tammuz. That these are correctly identified as the two deities in question is indicated by the seal's own inscription. More importantly, however,

is the symbol of Tammuz that is shown above his hand since this is identical to that of Shamash. That the ancients themselves identified Shamash as the planet Saturn need also not be re-stressed.²

In keeping with the subject of Creation that we have been deliberating, we also find that

¹ F. W. Albright, "The Mouth of the Rivers," *The American Journal of Semitic Languages and Literatures* (July 1919), p. 171.

² J. G. Frazer, The New Golden Bough (N.Y., 1959), p. 348.

³ W. F. Albright, Yahweh and the Gods of Canaan (N. Y., 1968), p. 147.

⁴ See, here, D. Cardona, God Star (Victoria, British Columbia, 2006), pp. 266-267, 269, 449; idem, Flare Star (Victoria, British Columbia, 2007), pp. 219-220, 302; idem, Metamorphic Star (Oregon, 2011), pp. 121-122, 254. ⁵ F. W. Albright, op. cit., p. 148.

⁶ See, here, D. Cardona, *God Star* (Victoria, British Columbia, 2006), pp. 213, 225; *idem*, *Flare Star* (Victoria, British Columbia, 2997), pp. 64-65, 105, 125-126, 133-134, 220; *idem*, *Metamorphic Star* (Oregon, 2011), pp. 37, 65, 66, 121-122, 248, 300-301, where, in all cases, various references are included.

⁷ D. A. Mackenzie, *Myths of Babylonia and Assyria* (London, 1915), republished as *Mythology of the Babylonian People* (London, 1996), p. 116.

⁸ S. H. Langdon, op. cit., p. 131.

⁹ See here, D. Cardona, *God Star* (Victoria, British Columbia, 2006), pp. 128 ff. where evidence for the above is amply supplied.

¹⁰ S. H. Langdon, op. cit., pp. 350-351.

¹¹ For Shamash as originally having been Saturn, see, D. Cardona, op. cit., pp. 122 ff., 129, 130, 145, 147, 165, 178, 207, 208, 210, 213, 225, 252, 447.

¹ S. H. Langdon, op. cit. p. 188.

² D. Cardona, *God Star* (Victoria, British Columbia, 20026), pp. 122 ff., 129-130, 145, 247, 165, 178, 207, 208, 210, 213, 225, 252, 447.



The Sumerian seal showing a worshipper standing between Ishtar, on the left, and Tammuz, on the right.

Shown above the hand of Tammuz is the symbol of Shamash.

Tammuz was "implicitly identified" with the river into which he was later said to have been cast, which river, called Hubur, was believed to have been the "river of fertility," the very "creator of everything." At the same time, a title that was born by Tammuz identified him with the great serpent of heaven that was said to have emanated from Anu, who was actually himself. This should not disconcert us since, more than anything else, the discharged material took on a snake-like appearance. As Albright himself well understood—even if he misunderstood so many other matters in relation to the same subject—the ancient river-god displayed a tendency to appear as a serpent.

SERPENTINE ENTITIES

One thing, among so many, that must be emphasized at this point is that the mythohistorical record speaks of more than one cosmic serpent, by which I mean that not all mythological serpents represented the same celestial entity or referred to the same event. Robert Thomas Rundle Clark noted this in relation to Egyptian lore, but it applies to all mythology. That being the case, in order not to stray from the trend we have been following, we must check the sources at our disposal in search of those serpentine divinities that are not only associated with Creation, but also with the Creator.

In keeping with some of the oldest evidence that has escaped the ravages of time, we come across the Chaldean god formerly read as Hoa and/or Hea. This deity is the same as the one

¹ W. F. Albright, "The Mouth of the Rivers," *The American Journal of Semitic Languages and Literatures* (July 1919), p. 182.

² *Ibid*., p. 167.

³ S. H. Langdon, op. cit., p. 78.

⁴ W. F. Albright, loc. cit.

¹ R. T. Rundle Clark, Myth and Symbol in Ancient Egypt (London, 1978), p. 239.

who is now more popularly rendered simply as Ea, the Saturnian identity of whom we have already touched upon. In keeping with what we have been unearthing, Hoa was not only known as "the lord of the abyss," the watery-appearing circumstellar disk surrounding the proto-Saturnian sun, but also as "the king of the rivers." One of his emblems, however, was the serpent, and a benevolent one at that.

Another deity we have already identified as proto-Saturn is the Sumerian Ninurta who, among other designations, was known as the "serpent of fiery glance." This not only describes the deity as having morphed into a snake, but also as one the shining nature of which was likened to a flaming discharge.

This discharge is also proclaimed in the Egyptian *Pyramid Texts* where the "serpent with its many coils" is referred to as the Creator's "outflow." A hymn from the *Coffin Texts* of the same ancient country has the serpent of Creation uttering the following words:

"I extended everywhere, in accordance with what was to come into existence...I bent right around myself, I was encircled in my coils, one who made a place for himself in the midst of his coils."

Just as, in Mesopotamia, the celestial river called Hubur was considered to have been a female deity, so likewise was one form of the Egyptian serpent of creation, here called Mut, considered to have been a goddess. More importantly we find that Mut originally encircled her father, or begetter, who is named as Re, and thus the proto-Saturnian deity. For that reason, the most significant emblem of Re, also known as Ra, that is often shown above his head, is the Uraeus serpent encircling the cosmic sphere. What is, however, just as important, is that Mut was also claimed to have given birth to the same Re in his new form of Khonsu, thus indicating the re-emergence of the proto-Saturnian sun in the new form it achieved following its flare-up.

Osiris was yet another Egyptian deity we have recognized as an embodiment of proto-Saturn. Not only was he identified with the celestial river Nile, but also with the encircling serpent of our discussion. "O Osiris, whom the great serpent envelops" was the manner in which the god was lauded. Thus, besides the urns full of water that we have already mentioned, figures representing serpents were also carried during the procession that marked the festival dedicated to him. Much later in time, Gnostic gems were still depicting the

¹ G. Rawlinson, The Seven Great Monarchies of the Ancient Eastern World, Vol. I (N.Y., 1885), p. 79.

² *Ibid.*, pp. 79, 349.

³ G. Michanowsky, The Once and Future Star (N.Y., 1977), p. 83.

⁴ J. V. Kinnear Wilson (with H. Vanstiphout), *The Rebel Lands* (Cambridge, 1979), p. 17.

⁵ R. T. Rundle Clark, op. cit., p. 50.

⁶ *Ibid.*, p. 51.

⁷ W. F. Albright, op. cit., pp. 166, 167.

⁸ H. Frankfort, Kingship and the Gods (Chicago, 1948), p. 180.

⁹ Ibid.

¹ M. Oldfield Howie, op. cit., p. 24.

² A. Piankoff, The Tomb of Ramesses VI (N.Y., 1945), p. 130.

³ H. M. Westropp & C. S. Wake, Ancient Symbol Worship (N. Y., 1875), p. 20.

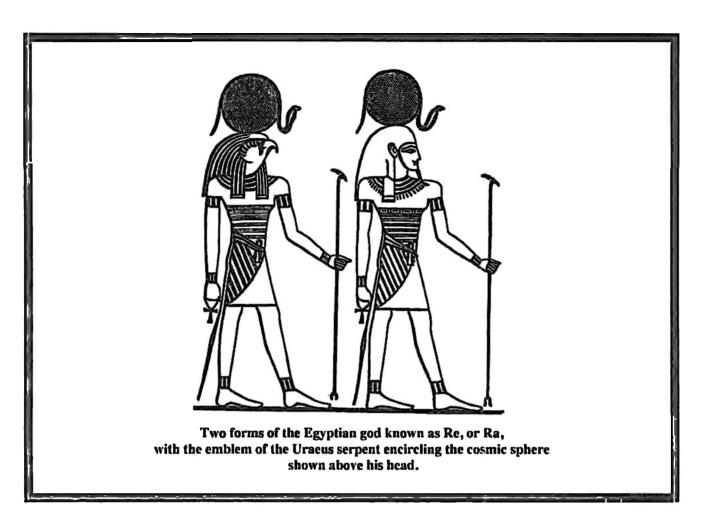


figure of a snake encircling the names of various deities including that of Osiris.¹

Bī Ela Kapūra does not mince words in telling his readers that: "The serpent theme in Indian tradition is well known." One of these themes concerns the snake that served as the god Shiva's garland. Another involves the snake known as Ananta and/or Shesha (sometimes rendered Sesha) who serves as a bed for the god Vishnu "as he sleeps on the cosmic waters" during "the time of creation." Ananta means "endless," while Sesha, who "arched over the waters and held them in thrall," has a meaning that is usually rendered as "residue."

Another serpentine entity that crops up in Hindu mythology is Vritra, whose name has

¹ M. A. van der Sluijs & A. L. Peratt, "The *Ourobóros* as an Auroral Phenomenon," *Journal of Folklore Research* (January/April 2009), p. 8.

² B. E. Kapūra (writing under the name B. L. Kapoor), Gods of the High Hills (New Delhi, 2001), p. 60.

¹ lbid. 2 lbid.

³ M. A. van der Sluijs & A. L. Peratt, op. cit., p. 11.

⁴ H. Zimmer, Myths and Symbols in Indian Art and Civilization (Princeton, 1974), p. 62.

⁵ H. S. Bellamy, Moons, Myths and Man (London, 1949), p. 75.

⁶ H. Zimmer, loc. cit.

been translated as "the coverer," "the encompasser," "the enveloper," the "restrainer," and "binder." Take your choice—all the above translations are in keeping with the manner in which the expanding spiraling matter was seen to react with the slow dispersal of proto-Saturn's circumstellar disk. It was in this regard that Vritra is said to have "bound" the waters, although, in a different sense, he is also said to have stolen those same waters.

We come across the same symbolism half way around the world in Mesoamerica, but even here we continue to meet with misconceptions. Thus, as a for-instance, over a century ago, Carl Lumholtz was preaching that, as far as most Amerinds were concerned, the sea "surrounds the entire world" that, "with its serpent-like motions," is equivalent to "the largest of all serpents." Hartley Alexander tells us that the Aztecs thought of the sea "as a circumambient Great Serpent." But what the Aztecs really portrayed, as in the Codex Cortesianus, was an ocean-encircling serpent that was once mistaken for a rain-containing one. In other words, the serpent and the ocean were different entities, the one surrounding the other. It is interesting that, to the Maya, who were in Mexico before the Aztecs, the word can-bak, which means "full circle," also means "circular serpent."

Slightly farther up north, the Hopi Amerinds had their own version of the celestial serpent which, in one particular instant, is shown encircling a symbol that has been interpreted as the "shrine house" of the entity in question.¹² More than that, the symbol of this shrine house is surrounded by radial lines that have been interpreted as "curved sticks," but which we recognize as the emblematic radiant streamers emanating from the centrally located proto-Saturnian outburst. Actually, the traditional depiction of the encircling serpent on Amerind pottery is among the most copious.²

Matters are no different down in Australia. Probably through a misunderstanding of something their ancestors might have told, some of the Aborigines believe that Wunggud, a big female snake, lives underground. This snake is said to be the one "from which everything in nature is formed." Before Creation, however, Wunggud is believed to have been "tightly coiled" into a ball that is likened to what has been translated as a "ielly-like substance."

¹ M. Müller, op. cit., p. 179.

² H. S. Bellamy, loc. cit.

³ J. Herbert, "Hindu Mythology," in "India: The Eternal Cycle," *Larousse World Mythology* (London, 1972), p. 228.

⁴ W. D. O'Flaherty, *Hindu Myths* (Harmondsworth, 1976), p. 358.

⁵ M. Eliade, Patterns in Comparative Religion (London, 1996), p. 429.

⁶ *Ibid.*, p. 453.

⁷ *Ibid.*, p. 84.

⁸ C. Lumholtz, Symbolism of the Huichol Indians, Volume III of the Memoirs of the American Museum of Natural History (N. Y., 1907), p. 81.

⁹ H. B. Alexander, "Latin American Mythology," Mythology of All Races, Vol. XI (N. Y., 1964), p. 57.

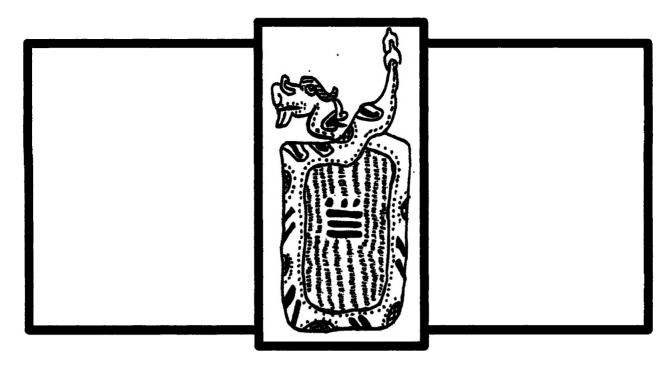
¹⁰ M. Oldfield Howie, op. cit., p. 304.

¹¹ P. Tompkins, Mysteries of the Mexican Pyramids (N. Y., 1976), p. 173.

¹² A. Patterson, A Field Guide to Rock Art Symbols of the Greater Southwest (Boulder, Colorado, 1992), p. 178.
¹ Ibid.

² See, for instance, S. K. Lothrop, Pre-Columbian Designs from Panama (N. Y., 1976), pp. 17, 27, 43.89, 103.

³ D. Mowaljarlai & J. Malnic, Yorro Yorro: Everything Standing Up Alive (Broome, Australia, 2001), p. 44.



The water-enclosing serpent from the Codex Cortesianus.

A depiction of this very concept can be found among the Aboriginal rock art in Kakadu National Park in which the serpent is shown spiraling around a central orb.¹

Cutting across the lawn we come to the religious movement of the early Christian era known as Gnosticism, which designation is derived from the Greek gnostikos, meaning "learned" and/or "knowledge." In rummaging through extant texts, we learn that those who attached themselves to this convoluted creed believed in an "archetypal form" that appeared "prior to the beginning," which form was described as having "descended gradually like a coiled snake" amid a "watery substance." As we have already noted, quite a few gems from that exterminated creed depicted the figure of a snake encircling the names of various deities including that of Osiris. Others, however, encircled the name of the god called Iao, which name is merely a different rendering of Yahweh that, in the western world, is often rendered as Jehovah.

JÖRMUNGANDR

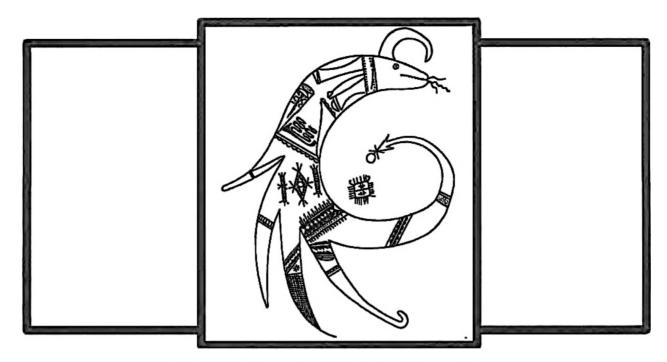
A prominent example of the encircling serpent comes to us from Norse mythology where he is known as Jörmungandr, which name is Anglicized as Jormungand. He is also known as the Midgard serpent, or the serpent of Midgard, because he is described as having encircled Midgard, which, as in most of these cases, has been misunderstood as a name for Earth.² The

¹ C. Jones, "Rock Serpent May Predate All Religions," Canberra Times (October 30, 1996).

² W. Barnstone, op. cit., p. 570.

¹ M. A. van der Sluiis & A. L. Peratt, op. cit., p. 8.

² See, for instance, E. C. Krupp, op. cit., p. 287.



Hopi serpent encircling the symbol of his radiating shrine.
(Illustration from a painted design on a Hopi bowl.)

name Midgard, however, is ultimately derived from the Gothic *midjun gards* which simply means "middle enclosure," an apt name for the object of our discussion.

Jörmungandr's encirclement came about when Odin, fearful of the serpent's ever-growing stature, flung it into the sea that surrounded Midgard. There, he continued to grow until, like the sea itself, he completely circumscribed Midgard—for which he also became known as the Weltumspanner, the "Stretcher-round-the-world." — when he is said to have bitten his own tail.

THE TAURID COMPLEX

There have been numerous interpretations of this cosmic serpent by those who are either not acquainted, or in disagreement, with the proto-Saturnian events we have been reconstructing. While it would be futile to review all these attempts, one particular case is here chosen because it is based on a theory that has received a certain amount of recognition among interdisciplinarians.

The theory in question, which proposes that Earth had gone through a series of catastrophic encounters with comets and the meteoric debris from their break-up, was originally formulated by Victor Clube and Bill Napier. Among such meteoric debris, Clube and Napier mainly focused on the Taurid Complex that resulted from the break-up of Comet

¹ H. R. E. Davidson, Gods and Myths of Northern Europe (Harmondsworth, 1964), p. 32.

² R. Brown, Jr., Researches into the Origins of the Primitive Constellations, Vol. II (Oxford, 1900), p. 105.

³ S. Sturluson, *The Prose Edda* (N. Y., 1929), p. 42; M. Oldfield Howie, *The Encircled Serpent* (N. Y., 1995), p. 400,

¹ V. Clube & B. Napier, The Cosmic Serpent (London, 1982); idem, The Cosmic Winter (Oxford, 1990).

Encke. It is this debris that, according to Moe Mandelkehr, ended up encircling Earth in 2300B.C. And, still according to him, it was this encircling ring of debris around Earth that was envisioned by ancient man as the mytho-historical cosmic serpent under discussion.²

The biggest problem with Mandelkehr's scenario is that from nowhere on Earth would this Earth-circling debris have appeared as a circle. And since, for reasons we need not here go into, he believes the ring to have been tilted at an inclination of 70° to Earth's axis, 3 neither would it have appeared to be stationary from any particular terrestrial locale. As he describes it: "For a single viewer at a specific location, the ring would [have appeared] to move from east to west as the Earth rotated on its axis."4

It would not even have been as simple as that. As he himself goes on, "the ring would first extend from northwest to southeast, then swing around the south, then extend from northeast to southwest, and then swing around to the north." Yet even then, continuing from his description, we learn that it would not have simply swung by overhead, it would also have changed orientation over a twenty-four hour period. There would have been various other complexities, but let us not go into them since the above should more than suffice for our purpose. Besides which, although Mandelkehr keeps referring to the appearance of the ring, what would actually have been seen moving across the sky would have been a wide arc as his own illustrations amply demonstrate. All of which is at odds with his insistence that the apparition would always have been "viewed as a surrounding phenomenon."8

In a following paper, Mandelkehr identified what he continued to call the ring around Earth as the mythological celestial stream or river. which he expanded in yet another followup paper to include the encircling celestial serpent of our concern.²

One thing that his calculations led Mandelkehr to believe is that the ring of debris could not have lasted long. "I have no idea of how long the ring remained around the Earth," he wrote, but he assumed "that it was relatively short," the duration of which he limited to "weeks or months." As he then continued: "Regardless of how long it lasted," but "judging from the tremendous body of mythology pertaining to it," the apparition "must have made a dramatic impression on all peoples on the globe."4And, still referring to the apparition as a ring, he adds that it ended up taking "centre stage in all religions."⁵

¹ M. Mandelkehr, "The Ring About the Earth at 2300 BC," Chronology & Catastrophism Review (2001:2), pp. 8 ff.; idem, "The Stream Surrounding the Earth," Chronology & Catastrophism Review (2005), pp. 41 ff.

² Idem, "Waters, Mountains and Serpents Surrounding the Earth," Chronology & Catastrophism Review (2007),

³ M. Mandelkehr, "The Ring About the Earth at 2300 BC," Chronology & Catastrophism Review (2001:2), p. 14. ⁴ *Ibid.*, p. 15.

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

⁸ *Ibid*. (emphasis added).

¹ Idem, "The Stream Surrounding the Earth," Chronology & Catastrophism Review (2005), pp. 41 ff.

² Idem, "Waters, Mountains and Serpents Surrounding the Earth," Chronology & Catastrophism Review (2007), pp. 9 ff.

3 Idem, "The Ring About the Earth at 2300 B.C.," see above, p. 15

⁴ Ibid.

⁵ Idem, "The Stream Surrounding Earth," see above, p. 41.

An open arc moving across the sky would not, however, have given the impression of a circular snake that ended up biting its own tail. And Mandelkehr knew this. As he himself asked: "Since the ring did not manifest a head or tail, why would it be viewed as a serpent?" And the only answer he could supply was his belief that the apparition would "definitely" have exhibited "a serpentine motion as seen from the ground" as it moved "through a 24 hour period." Well, I would not call that a serpentine motion, but, even so, a serpentine motion is hardly the same as a circular serpent biting its own tail, as the illustrations from various ancient cultures he himself included in his paper unmistakably show.

ODIN

Seeing that, in Norse mythology, it was Odin who flung Jörmungandr into the sea that surrounded Midgard, where it was said he ended up biting his own tail, we should endeavor to find out who Odin was. Actually, having already realized that the spiraling fiery stream was discharged by proto-Saturn, Odin's identity should not surprise us. But is there any valid evidence that links Odin to proto-Saturn?

Odin (or Othin) and Woden (or Woutan, as also Wodan), in their many variants, were names bestowed on the same god. To the Germanic peoples, the name was Woden or Wotan. To the Scandinavians, including the Icelanders, it was Odin.

In Worlds in Collision, Immanuel Velikovsky identified Odin/Woden as the planetery god Jupiter/Zeus. Earlier, other writers had identified Woden as Mercury, and, in fact, the Romans had so identified this deity. The Anglo-Saxons, who brought this Teutonic god with them to Britain, named a day of the week in his honor. Woden's day became the present Wednesday, which the Romans called dies Mercurii (or Mercurii dies), that is, Mercury's day. In French it became Mercredi.

Concerning the identity of Odin/Woden as Jupiter/Zeus, Velikovsky supplied no evidence beyond the fact that both sets of deities were acclaimed for the hurling of thunderbolts.³ Granted that Jupiter became known as the prime wielder of the lightning-bolt,⁴ other planetary deities were just as vigorous in their thundering.

That leaves us with the Roman identification of Woden as Mercury, and here there will be those who will caution us not to go against what the ancients themselves have claimed. And yet, other than those who had witnessed the actual events we have been reconstructing, were not the ancients just as susceptible to misidentifying the gods of their ancestors as modern

¹ Idem, "Waters, Mountains and Serpents Surrounding the Earth," see above, p. 12.

² Ibid.

³ *Ibid.*, pp. 13, 15

⁴ I. kovsky, Worlds in Collision (N. Y., 1950), p. 86.

⁵ See, for instance, J. A. MacCulloch, *Eddic Mythology* (N. Y., 1930.1932), p. 37.

[°] Ibid.

¹ T. Froneck, *The Northmen* (N. Y., 1974), p. 142; E. Tonnelat, "Teutonic Mythology," *New Larousse Encyclopedia of Mythology* (London, 1972), p. 252.

² Ibid.

³ I. Velikovsky, loc. cit.

⁴ D. Talbott & W. Thornhill, *Thunderbolts of the Gods* (Portland, Oregon, 2005), p. 44.

mythologists have been? That all of this makes the interpretation of myth that much more difficult cannot be helped. But it can perhaps be understood why our search should be for origins, since only by tracing this intricate maze to its inception can we ever hope to arrive unerringly at its logical end.

To the Romans, Mercury was a god of trade. His attributes were the *caduceus*, the winged sandals and/or helmet, and the purse. None of these attributes were shared by Odin. The myths of Odin/Woden and Hermes/Mercury have absolutely nothing in common. Why, then, did the Romans identify one with the other?

Among his many attributes, Odin was regarded as the god of spiritual life. According to Ernest Tonnelat, it was this that led the Latins to compare him to Mercury. To us it is not enough.

In Germanic lands there was a widespread belief that, on dark and stormy nights, a god in flowing mantle and wide-brimmed hat, mounted on a horse, was wont to thunder through the sky at the head of a furious army bent on a savage hunt in pursuit of some fantastic game. The god's name was Wode, derived from a word that expressed fury and frenzy. In modern German, this word is *wuten*. It is therefore believed by some that this is how Woden derived his name.²

In the north, among the Scandinavians, Odin rode on his eight-legged horse, Sleipnir. The god is said to have been clad in a shining breast-plate and golden helmet, while in his hands he carried his magic lance, Gingnir.³

Among both peoples, Odin/Woden became the national god of war and it was under his patronage that the Angles and the Saxons invaded Britain.⁴

Shining breast-plates and golden helmets might remind us of Roman armor, but flowing mantles and wide-brimmed hats tend to leave us with a Medieval impression. One can hardly visualize any of this apparel encumbering a god who predated the Teutonic age. This aspect of the god is obviously a very late one. Tonnelat was of the same opinion:

"There is no evidence to suggest that leading the wild hunt was Woden's original function. There is no evidence, either, to suggest that the name *Wode* precedes *Woden*; both may be synchronous..."

This has led some researchers to the belief that Odin/Woden arrived late on the Nordic scene and that the god's characteristics evolved from that of an originally minor demon. As Tonnelat indicated, that, too, is a false impression:

"For some time, scholars have regarded Woden as a 'jumped-up' god; originally a minor demon, he has managed to oust the more important [Nordic] divinities ... [But]

¹ E. Tonellat, op. cit.,p. 253.

² Ibid.

³ *Ibid.*, p. 254.

⁴ *Ibid.*, pp. 252 ff.

¹ *Ibid.*, p. 253.

recent researches have shown that this is not the case, that Woden is a prolongation of an Indo-European type."

What all this has led to among most mythologists is that Odin/Woden is the shadow of a very ancient deity who, throughout the ages, has undergone a number of adaptations. Like that of other deities, his mythology is a complex one, but, at its root, there are still several motifs that, through comparative mythology, will enable us to identify this Teutonic monarch with the real planet he originally personified.

There have been some who have surmised that Kronos, the Greek god of the planet Saturn, derived his name from the Greek word *corone*—compare also the Latin *cornix*—which means "crow."²

Whether the above view is acceptable or not, it remains a fact that Kronos was often pictured in the company of a crow. In fact, the crow can be said to have become Kronos' very symbol.

And, at least in art, Odin is often figured seated on a throne attended by two ravens named Hunin and Munin.³

More importantly than that, however, we find that, much like the Saturnian deities of other nations, it was Odin who was said to have created the world. Known by the epithet Alfadir—that is, Allfather—Odin was also, like Osiris/Saturn, known as the creator of the gods.

"Odin may justly be called All-father, for he is verily the father of all, of gods as well as of men, and to his power all things owe their existence."

Like proto-Saturn, Odin was said to have resided at the cosmic centre, known as Ginnungapap, that was also called the Navel of the Earth, alternately alluded to as the Navel of Heaven that, as we have already seen, was believed to have been situated right in the centre or Pole of heaven."

There are various other characteristics that serve to identify Odin as Saturn, but these relate to later events that I do not wish to present out of their proper chronological order.⁴ The above, however, should suffice.

The flinging of Jörmungandr by Odin into the celestial sea that surrounded Midgard can then be seen as additional evidence that the celestial serpent of our interest was actually discharged by the proto-Saturnian orb.

¹ *Ibid.*, pp. 252-253.

² R. Graves, op. cit., p. 38.

³ A. S. Murray (with Q. H. Klapp), Manual of Mythology (N. Y., 1950), p. 363.

⁴ J. W. Perry, Lord of the Four Quarters: Myths of the Royal Father (N.Y., 1970), p. 184.

⁵ Ibid., p. 188; E. A. W. Budge, The Gods of the Egyptians, Vol. I (N. Y., 1904/1969), pp, 300, 314.

¹ J. W. Perry, op. cit., p. 185.

² *Ibid.*, pp. 182, 183.

³ W. F. Warren, Paradise Found (Boston, 1885), p. 218.

⁴ Those interested or curious enough can consult D. Cardona, "Odin," KRONOS X:1 (Fall 1984), pp. 55-56.



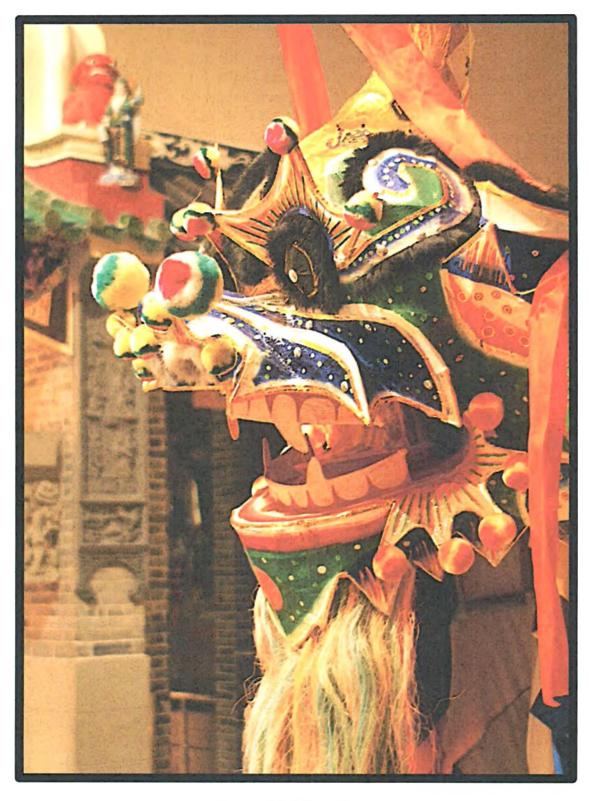
Odin, seated on his throne in the company of his ravens, Hunin and Munin.

THE CHINESE DRAGON

Although there will be those who disagree, if there is a single cultural emblem that represents China, it will have to be the dragon that has become familiar to westerners in the serpentine examples that are paraded in Chinese New Year festivals. As Carter Sutherland rightly noted, the context of the dragon's widespread use can only be matched by the Christian cross and the crescent of Islam.¹

One aspect of the Chinese dragon that has received quite a bit of attention concerns its

¹ C. Sutherland, "China's Dragon," PENSEE (Winter 1973-74), p. 47



Ceremonial Chinese dragon.
(Photograph by the author, courtesy of the Hong Kong Museum of History)

age, debates concerning which have mostly centered on the inclusion of the word lung, Chinese for "dragon," in ancient texts.¹

Heriee Glessner Creel was among the first to posit that the dragon is first mentioned on the oracle bones from the Shang dynasty,² and although this has been contested,³ it is now generally accepted. This would make the dragon's appearance in ancient texts go only as far back as somewhere between 1200 and 1050 B.C. It must, however, be kept in mind that Chinese writing itself is no older than the very oracle bones in question. What that means is that the dragon was already known and written about when Chinese writing first came into being. Images, however, are a different matter and, to be sure, a statue of the dragon dating back to the Yangshao culture, usually dated around 5000 to 3000 B.C., was discovered in Henan in 1987.⁴ Besides which, as in other ancient civilizations, we can justly posit that dragon lore would have been passed on from one generation to another through the timetested methods of public recitals, ritual performances, and dramatic presentations from long before that.

The Chinese dragon is often portrayed in the act of chasing a globe that is usually referred to as a *chuh*, the meaning of which is "pearl." The object in question, however, is more correctly rendered *huoh chuh*, in other words, a "fire pearl." Even in New Year festivals, a pole-supported fire pearl is usually carried ahead of the writhing dragon image.

In just as many instances, the dragon is also shown encircling, rather than chasing, the huoh chuh. Sutherland was in error when he claimed that the placement of the fire pearl within the dragon's encircling tail was adapted simply for symmetrical design. Judging by the embroidered effigies of the dragon on imperial robes, the dragon's encirclement of the pearl seems to take precedence over pearl-chasing images.

We will cast aside various interpretations that have been attached to both the dragon and its pearl through the ages, including associations with alligators, dinosaur fossils, thunder and lightning, to say nothing of the Sun and Moon, since this would take us on a long winding journey through frivolous disseminations. On the other hand, notwithstanding its apparent inanity, we cannot exclude the pearl's identity as an egg⁶—a cosmic one, to be sure—since, together with the dragon, it has been viewed by mythologists to have been directly associated with Creation. As van der Sluijs, despite our disagreements on other matters, ably noted:

¹ See, for instance, A. D. Brankston, Early Ming Wares of Chingtechen (Hong Kong, 1938/1970) p. 75; F. Waterbury, Early Chinese Symbols and Lierature, (N. Y., 1942), pp, 73, 130-138; J. Legge, The Chinese Classics, Vol. III: The Shoo King (Hong Kong, 1960), p. 80; idem, The Chinese Classics, Vol. IV: The She King (Hong Kong, 1960), p. 402; H. G. Creel, The Origins of Statecraft in China, Vol. I: Western Chou Empire (Chicago, 1970), pp. 447-463; J. Wirgin, Sung Ceramic Designs (Stockholm, 1970), pp. 186, 188; C. Sutherland, op. cit., pp. 47-48; J. Paper, "The Meaning of the 'Y'ao-t'ieh'," History of Religions (August 1978), p. 2; K. Chang, Shang Civilization (Yale, 1980, pp. 204-209; J. K. Hord, "The Twilight of the Goddess: An Ancient Religious Revolution," Comparative Civilizations Review (Fall 1987), pp. 76-77.

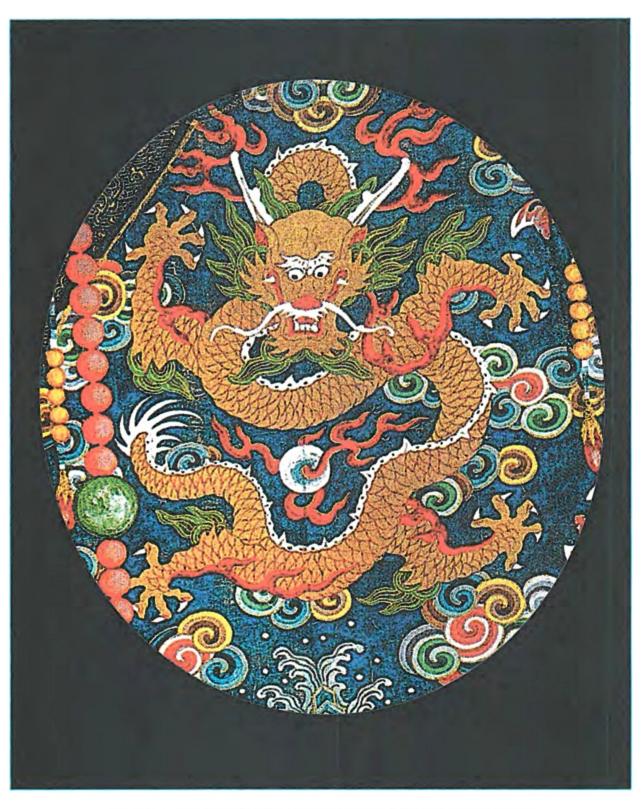
² H. G. Creel, *The Birth of China* (N. Y., 1937), p. 104.

³ See, for example, D. N. Keightley, Sources of Shang History: The Oracle-Bone Inscriptions of Ancient China (Berkeley, 1978), pp. 59, 80.

⁴ H. Giskin & B. S. Walsh, An Introduction to Chinese Culture Through the Family (N. Y., 2001), p. 126.

⁵ C. Sutherland, op. cit., p. 47.

⁶ See, for instance, C. A. S. Williams, Encyclopedia of Chinese Symbolism and Art Motives (N. Y., 1960), p. 137.



Dragon encircling the fire pearl from the robe of Emperor Ch'ien-lung. (Photograph courtesy of the Metropolitan Museum of Art, New York.)

"The emphasis repeatedly placed in creation myths on the primacy of the serpent and the conception of the root particle as the serpent's 'egg' or 'gem' would support the idea that ancient societies regarded the root particle of creation as the outflow of the primordial spiral. In the case of the Chinese iconography of the dragon, the dragon traditionally pursued or 'belched forth' the desired gem..."

The emperor of China was known as *Tien Tsi*—variously transliterated—which means "Son of Heaven." His seat of power was the Dragon Throne, and the dragon, which was depicted on imperial robes down through the ages, remained the principal emblem of Chinese royalty. The emperor was in fact considered to be the *real* dragon.

This custom, and the belief behind it, originated with the legendary Huang-Ti, the Yellow Emperor, who was also said to have had the symbolic dragon depicted on his imperial robe.⁵

More than that, however, Huang-Ti was actually said to have had a dragon-like countenance and to have been transformed into an actual dragon when he died. That Huang-Ti was a *mythical* emperor is also known, and that he stood for the planet Saturn we have already shown.

Chinese emperors were considered to be avatars—that is reincarnations—of the dragon, and, in that respect, they have been compared to the pharaohs of Egypt who considered themselves avatars of Osiris and/or Horus. This gains additional significance since the dragon itself has also been compared to the Egyptian Osiris and the earlier Babylonian Ea. It can thus be seen that both the Chinese dragon and the dragon-reincarnated emperor have close affinities with the Saturnian deities—Ea and Osiris—of other ancient nations. It is therefore not surprising that in Burma, or what is now Myanmar, Saturday, or Saturn's Day, is dedicated to the dragon. On the dragon of the dragon.

Sutherland was entirely mistaken when, in attempting to corroborate one of Velikovsky's main theses, he misidentified the dragon and its pearl as the planet Venus in its previous near-cometary aspect. In all honesty, I have to confess that, in my pioneering days, and in support of Sutherland's thesis, I was just as guilty of so misidentifying the Chinese dragon and its fiery pearl. It is now quite apparent that, in comparison with the myths of other ancient nations, the encircling Chinese dragon is to be understood as the outflow of debris from proto-Saturn's axial pole, which debris continued to spiral out so far that, in time, witnesses of the

¹ M. A. van der Sluijs, *Traditional Cosmology*, Volume One (London, 2011), p. 127

² J. H. Arnold, Commercial Handbook of China (Washington, D.C., 1920), p. 446.

³ J. Paper, loc. cit.,

⁴ J. G. Andersson, Children of the Yellow Earth (Cambridge, Massachusetts, 1934), pp. 70-71.

⁵ M. Oldfield Howie, op. cit., p. 255.

⁶ Ibid.

⁷ M. Oldfield Howie, op. cit., p. 255.

⁸ Ibid

⁹ G. Elliot Smith, The Evolution of the Dragon (London, 1919), p. 91.

¹⁰ "Burma on the Bay of Bengal," Lands and People, Vol. IV: "Southern Asia and the Far East," (Toronto, 1956), p. 156.

¹¹ C. Sutherland, op. cit., in toto.

¹² D. Cardona, "Tektites and China's Dragon, KRONOS 1:2, (Summer 1975), pp. 35 ff.



In conformity with the legendary Huang-Ti, each Chinese emperor was considered to be the reincarnation of the celestial dragon.

(Illustration courtesy of Marty Noble.)

event could actually see it circumventing proto-Saturn's flaming globe. And it is the very watery illusion of proto-Saturn's circumstellar disk across which this debris spiraled that eventually associated the Dragon in Asian minds with water, rivers, lakes, and oceans.

Depictions of the dragon that show him chasing, rather than encircling, the fire pearl refer to the disruption of the proto-Saturnian system that occurred much later and involved a different dragon. After all, just as there was more than one cosmic serpent in the mythologies of other nations, so, also, was there more than one Chinese dragon, despite the fact they were all eventually rolled into one. The disruption of the proto-Saturnian system took place some five thousand years later than the events we are presently concerned with and must therefore be deferred to a future volume of this series. At this point I will however disclose that, just as in the mytho-historical records of other ancient societies, the disruption of the proto-Saturnian

system took place amid a flurry of planetary thunderbolts and cosmic lightning. For that reason, the offending dragon became closely associated with storms to the extent that, besides meaning "dragon," the word *lung* also came to stand for ordinary thunder.

As it was later construed:

"[the dragon] unfolds himself in the storm clouds; he washes his mane in the seething whirlpools. His claws are in the fork of the lightning, his scales begin to glisten in the bark of rain-swept trees. His voice is heard in the hurricane..."

Once the present solar orb replaced Earth's earlier proto-Saturnian stellar host, the identity of the dragon's pearl was likewise transferred to the Sun. From then on, the dragon's chase of the pearl was understood as an attack on the Sun and therefore the cause of solar eclipses.

That is the same outrageous situation we find in Egyptian mythology where the god Ra, or Re, is usually represented as the Sun despite the fact that the characteristics of the god bear absolutely no relation to those of the solar orb. Because the serpent Apep was predominantly associated with Ra, he therefore became associated by mythologists with the Sun. Thus, as in Chinese lore, the attack of Ra by the serpent Apep is consequently represented as an assault on the Sun during solar eclipses, a also throughout the night when the Sun is absent from the sky. The Sun's re-emergence from its darkening eclipses, together with its radiant reappearances each morning is then interpreted as the Sun's victory over Apep.

Grafton Elliot Smith was therefore right on the mark when he noted that the dragon legend "has been constantly growing in complexity, as new incidents were drawn within its scope and confused with old incidents whose real meaning was forgotten or distorted." And this can be said of all other myths concerning cosmic serpents regardless of their specific designations.

¹C. A. S. Williams, Outlines of Chinese Symbolism and Art Motives (N. Y., 1976), pp. 77-78.

² F. Fleming, "The Divine Creators," in H. Cleary & R. Petrie (eds.), *The Way to Eternity* (London, 1997), p. 39; M. A. van der Sluijs, "The Dragon of the Eclipses—A Note," *Culture and Cosmos* (Spring/Summer 2009), pp. 69, 71-72, 74.

³ E. A. W. Budge, op. cit., pp.11, 269 ff., 324-325; R. T. Rundle Clark, op. cit., pp. 209 ff.

⁴ G. Elliot Smith, op. c it., pp. 76-77.

Chapter 10

The Cosmogonic Egg

PHILOSOPHICAL EXPOSITIONS

s we have already seen, the myths of Creation are multifarious and, as we shall soon see, one consistent motif connected with this primordial event concerns what has gone down in the mytho-historical record as the universal, celestial, or cosmic egg. Like other concepts associated with Creation, the interpretation of this *ovum mundi*, which is found scattered throughout the entire world, has been somewhat tainted by various mythologists with an understandable philosophical undercurrent. Thus, Wallis Budge, echoing the beliefs of Heinrich Brugsch, described the primitive *credo* concerning the cosmic egg of the ancient Egyptians in the following words:

"[In the beginning] nothing existed except a boundless mass of water which was shrouded in darkness and which contained within itself the germs or beginnings, male and female, of everything which was to be in the future world. The divine primeval spirit which formed an essential part of the primeval matter felt within itself the desire to begin the work of creation, and its word woke to life the world, the form and shape of which it had already depicted to itself. The first act of creation began with the formation of an egg out of the primeval water..."

In the above philosophical paraphrasing of the event, collated from various snippets of Egyptian liturgies, we recognize various motifs we have encountered and discussed in both earlier chapters of this volume as also within the pages of its four prequels. Modern mythologists were not, however, the only ones who sought to explain the egg-motif inherent in the act of Creation through philosophical expositions. Consider, as an example, the Phoenician cosmogony, known to us through Eudemus, that relates the event in question as follows:

"From the union of [Desire and Darkness] were born Aer (air) and Aura (breath)...This couple then produced the cosmic Egg, in conformity with the intelligent spirit."²

So, similarly, according to Mochus, in the second century A.D., who wrote as follows:

"...there was in the beginning a double principle: Aether and Air. Then came the Wind and afterwards the two winds Lips and Notos; later Oulomos (the Ages) and still later Chousor, the Opener, and the Egg."

¹ E. A. W. Budge, The Egyptian Book of the Dead (N. Y., 1895/1967), p. xcviii.

² L. Delaporte, "Phoenician Mythology," New Larousse Encyclopedia of Mythology (London, 1972), p. 274.

When it comes to Indic lore, the Laws of Manu state:

"This (all) was darkness, unknowable, without form, beyond reason and perception, as if utterly asleep. Then the august and self-existing Being, he who never unfolded, having unfolded this (all) under the form of the great elements and others, having shown his energy, appeared to scatter the shades of darkness. This (Being) whom only the spirit can perceive, subtle, without distinct parts, eternal, including in himself all creatures, incomprehensible, appeared spontaneously. Wishing to draw different creatures from his body, he first by thought produced the waters and deposited his seed in them. This (seed) became a golden egg, in brilliancy equal to the sun. In that (egg) he himself was born as Brahman, the progenitor of the whole world..."

Despite its characteristic philosophical rendering so typical of Indic renditions, we can still discern a vital aspect that promises to take us far in our interpretation of all that was involved in the act of Creation. This concerns the statement that the "golden egg" was produced after the "self-existing Being" had scattered "the shades of darkness" or, in other words, following the shedding of the light. In fact, a different translation of the same verse has it that this self-existing Being "shone forth of his own will," rather than "appeared spontaneously."

What, however, was this *seed* that the self-existing Being deposited in proto-Saturn's circumstellar "waters," which *seed* is said to have evolved into a "golden egg"? David Talbott has compared this issue—pun only partly intended—to a particular aspect of the Egyptian deity known as Atum, concerning whom he wrote:

"Atum is the masculine power of heaven, the *luminous seed* embodying all the elements of life...which flow from him in streams of light. He is the universal source of fertility animating and impregnating the Cosmos."

It therefore seems that, whatever it really was, the cosmic egg was believed to have been formed from the spewing of the light.

STELLAR ASSOCIATIONS

In our quest to find out what exactly was this egg, we turn to a 3rd century post-Han work from China known as the San-Wu Li-Ki. According to this work, it was the primeval Chaos that existed before Creation that looked like a hen's egg. After a very long period of time, this egg opened up and P'anku was born. It was from the body of P'anku that the "world" was said to have come into being. And, according to Wang Sai Ching—variant Wong Shi Shing—"P'anku came forth in the midst of the great chaotic world," having "existed before

¹ Laws of Manu 1:v:5-9.

² R. Van Over, Sun Songs: Creation Myths From Around the World (N.Y., 1980), p. 327.

³ D. N. Talbott. The Saturn Myth (N. Y., 1980), p. 12 (emphasis added).

¹ M. Soymie, "China: The Struggle for Power," Larousse World Mythology (London, 1972), p. 274.



Traditional illustrations of the cosmic Egg concept, as shown in the above Hindu example, can be as convoluted as its philosophical rendering.



P'an-ku, born out of chaos, holding the Yin-Yang symbol that, despite its later philosophical interpretation, was originally indicative of whirling motion.

(From a nineteenth century lithograph.)

the shining of the light." The only items we have thus far discovered that ancient man would have seen up in the sky before the shining of the light was proto-Saturn and its rotating circumstellar disk.

That the Creator's egg was known to be a cosmic—or, at least, a celestial—entity is evidenced from an extant Arabic cosmogony of ancient origin that states in no uncertain terms that it was the *primordial star* that was "presented under the form of an egg that contained all things that were to be born."²

The same concept was—and to some still is—held half a world away, in Fiji, where the god Ngendei is also said to have accomplished Creation by "hatching" out an egg.³ And, among the Tahitians of the Society Islands, the act of Creation continues to be lauded. As in the myths of other races, we find the original deity Ta'aroa encased in a cosmic egg, ruling alone in darkness.

"Ta'aroa (The-unique-one) was the ancestor of all the gods; he made everything. From time immemorial was the great Ta'aroa...[He] developed himself in solitude; he was his own parent, having no father or mother...Ta'aroa sat in his shell in darkness for millions of ages. The shell was like an egg revolving in endless space...Rumia was the name of that shell of Ta'aroa."

Here it is worthwhile to note that, in ancient Tahiti, the name Ta'aroa—Ta'urua or Tangaroa—was applied to a variety of stars with an explanatory designation attached to the name to indicate which particular star was meant.⁵ Although the name itself has been translated as meaning "festivity," it is more than obvious that Ta'aroa simply stood for "star." This, then, can be taken to mean that a primeval star had once existed within a revolving shell that was thought of as an egg.

SATURNIAN IDENTIFICATIONS

Berossus, who was a Babylonian priest of Bel Marduk, tells a tale concerning the coming of one named Oannes—also called Musarus and/or Annedotus—who was claimed to be the civilizing deity of the Chaldeans. He was said to have emerged from the sea,⁷ which sea is now easily understood as proto-Saturn's circumstellar disk. According to Photius of Constantinople, however, an earlier writer named Helladius, who referred to Oannes as Oe, states that the deity "came out of a great egg" and was referred to as "the Egg-Born." But

¹ Compendium of Wong-shi-Shing, as quoted by I. Donnelly, Ragnarok: The Age of Fire and Gravel, republished as The Destruction of Atlantis (N.Y., 1971), p. 210 (emphasis as given).

² V. Paques, L'Arbre Cosmique dans la Pensee Populaire et dans la Vie Quotidienne du Nord-Ouest Africain (Paris, 1964), p. 47.

³ G. H. Luquet, "Oceanic Mythology," New Larousse Encyclopedia of Mythology (London, 1972), p. 449.

⁴ T. Henry, Ancient Tahiti (Honolulu, 1928), p. 336 (emphasis added).

⁵ *Ibid.*, pp. 360, 363.

⁶ *Ibid.*, p. 363.

⁷ Syncellus, Ekloge Chronographias, as cited by R, K, G, Temple, The Sirius Mystery (N. Y., 1976), pp. 248-249.

¹ *Ibid.*, pp. 256-257.

then there is Sozomen, the 5th century A.D. historian, who drew on the earlier works of Rufinus, Eusebius, Athanasius, Sabinus, and Palladius, and reported that this deity descended as "a fiery star from the sky." We thus catch an echo of the cosmic egg's identity not only as a star, but, similar to the dragon's fiery pearl, an actual blazing one. More than that, however, the egg's connection to Saturn can be ascertained through the very Oannes since, as George Rawlinson indicated, this name may be rendered as Hoa-ana, that is the god Hoa, and thus the god Oe that Helladius wrote about. Oe, however, is what today is read as Ea, whose Saturnian identification we have already presented in past pages of this very volume.

Another thread that links the cosmic egg to Saturn can be followed through the cosmogony of Mochus in which it was Chousor, the Opener, that was associated with the egg. Through comparative mythology, William Foxwell Albright was able to identify Koshar, also known as Kothar and/or Kosar, the same as Chousor, with Tammuz,³ and even Ea,⁴ both of whom are identifiable as different versions of the Saturnian deity.

Moreover, still according to Albright, Chousor's designation as Opener identifies this Phoenician god with the Egyptian Ptah,⁵ whose very name translates as "Opener," and who, in one Egyptian version, was also described as the actual molder of the celestial egg.⁷

For us this has additional meaning since not only was Ptah considered the primal god of Memphis at a time when it was the capital of Egypt's Old Kingdom,⁸ but he was also deemed to have been the very Creator of all that had been created.⁹ This was judged so important that Shabaqo, the Nubian king who ruled Egypt during its 25th dynasty, went to great pains in copying the contents of what to him was already "an ancient religious document" that he claimed to have found at Memphis, onto a large basalt slab—now housed in the British Museum—which describes Ptah's creation of the "world." ¹⁰

Additional to that, in both religious and funeral texts, Ptah is often delineated as Ptah-Asar—that is, Ptah-Osiris.¹¹ The identification of Osiris with proto-Saturn need not be repeated, but, as if to clinch the matter, a section in the *Pyramid Texts* refers to Ptah as the Living One,¹² while describing him as "the greatest of those who are in the northern sky."¹³

The association of the cosmic egg with Osiris does not merely rest on the god's relation with Ptah. Osiris himself was in fact alluded to as "the Great Egg"—"the only egg"—and was

¹ *Ibid.*, p. 257.

² G. Rawlinson, The Seven Great Monarchies of the Ancient Eastern World, Vol. 1 (N. Y., 1885), p. 79.

³ W. F. Albright, Yahweh and the Gods of Canaan (N. Y., 1968), p. 147.

⁴ *Ibid.*, pp. 136, 143.

⁵ *Ibid.*, pp. 223, 225.

⁶ E. A. W. Budge, The Gods of the Egyptians, Vol. 1 (N. Y., 1904/1969), p. 500.

⁷ *Ibid.*, pp. 501, 508.

⁸ R. T. Rundle Clark, Myth and Symbol in Ancient Egypt (London, 1950/1978), pp. 59.

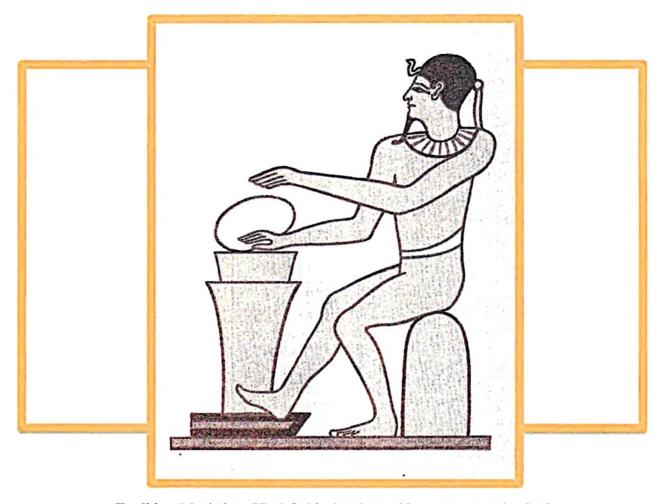
⁹ *Ibid.*, p. 60.

¹⁰ S. M. Burstein, review of *The Kingdom of Kush*, by D. A. Welsby, in *Archaeology Odyssey* (March/April 2000), p. 59.

¹¹ E. A. W. Budge, op. cit., pp. 502, 507.

¹² R. T. Rundle Clark, op. cit., p. 59.

¹³ Ibid.



Traditional depiction of Ptah fashioning the world egg on a potter's wheel.

lauded as "thou egg who becometh as one renewed." 1

According to Diodorus, there was once an inscription on a column erected near Nysa, in Arabia, in which Osiris is made to say: "I was born of a brilliant and magnificent egg, and my substance is of the same nature as that which composes light." And, in the *Papyrus of Ani*, Osiris is, pure and simply, made to utter: "I am the egg."

According to other Egyptian texts, from the egg there "broke forth Ra." Thus, in the Egyptian Book of the Dead, "reference is made to the enemies of Ra 'who have cursed that which is in the egg'."

There is no need to remind the reader that all these Egyptian deities that have been associated with the cosmic egg have elsewhere been identified as representative of the proto-Saturnian sun.

¹ D. A. Mackenzie, Egyptian Myth and Legend (N. Y., 1907/1978), p. 367.

² M. P. Hall, Freemasonry of the Ancient Egyptians (N.Y., 1937/1965), pp. 59-60.

³ E. A. W. Budge, The Egyptian Book of the Dead (N. Y., 1895/1967), p. 94.

⁴ Ibid., p. xcviii.

⁵ D. A. Mackenzie, op. cit., p. 74.

When we come to India we find that Brahma, whom we mentioned above, was not the only avatar of the Creator associated with the cosmic egg. Prajapati, the One God, father of all other gods, creator of all that had to be created, was also said to have formed hiranyagarbha, the golden egg, and that he formed it from the sweat, or outflow, of his own body. As in the mytho-historical records of other nations, the egg floated for a time "upon the primordial waters" before giving birth to what, as usual, is misconstrued as "the world."

In an Orphic theogony set forth by Damaskios, it is Chronos who produced the egg.³ And despite the fact that Chronos was the Greek god of Time, that very god was actually a singular facet of the deity known as Kronos,⁴ a disclosure that has since been reinforced by Giorgio de Santillana and Hertha von Dechend.⁵

This same mythic theme was also exemplified by the Greek philosopher Epicurus according to whom the *pneuma*—that is, the soul—wound itself around the egg like a serpent.⁶ In fact, even in Orphic theogony, the Chronos who was said to have produced the cosmic egg was described as a serpent.⁷

The association of the Saturnian deity with the cosmic egg was so well known in ancient times that, millennia later, the alchemists could still recall the "world-egg" as "the ancient Saturn."

SEQUENTIAL COMPLEXITY

As convoluted as the mythic themes concerning the cosmic egg happen to be, quite a few of them retain significant aspects that will help us fathom this conundrum. And yet, there does seem to be a contradiction in the received reports. So let us first try to reconcile with this.

We start by going back to the Laws of Manu in which it is said that the seed from which the egg was born was deposited after the "Being" had "scattered the shades of darkness." What this is telling us is that the seed from which the egg was born was deposited after the emission of proto-Saturn's light. As already indicated, the only items we have thus far discovered that ancient man would have seen up in the sky before the flare-up would have been proto-Saturn and its circumstellar disk.

A simple statement from Japan's mytho-historical record, on the other hand, tells us that it was the primeval chaos that looked "like an egg," as so, also, does the Chinese San-Wu Li-Ki in no uncertain terms. In fact, Wong Shi Shing tells us that P'anku, who was said to have

¹ H. de Wilman-Grabowska, "Brahmanic Mythology," Asiatic Mythology (N. Y., 1972), pp. 116-117.

² Ibid.

³ A. B. Cook, Zeus: A Study in Ancient Religion, Vol. II, Part II (N. Y., 1965), pp. 1022-1023.

⁴ W. A. Heidel, *The Day of Yahweh* (N. Y., 1929), pp. 468-469.

⁵ G. de Santillana & H. von Dechend, Hamlet's Mill: An Essay on Myth and the Frame of Time (Bosyon, 1969), pp. 135, 373.

⁶ R. B. Onians, The Origins of European Thought (Cambridge, 1954), p. 250.

⁷ A. B. Cook, op. cit., p. 1022.

⁸ C. G. Jung, Mysterium Conjunction (N. Y., 1977), p. 471.

⁹ Laws of Manu I: v: 5-9.

¹ E. D. Saunders & B. Frank, "Japan: Cults and Ceremonies," Larousse World Mythology (London, 1972), p. 298.

² M. Soymie, "China: The Struggle for Power," Larousse World Mythology (London, 1972), p. 274.

sprung from the egg, had existed "before the shining of the Light."2

The above interpretation receives additional evidence from the Tahitian version in which it is claimed that this egg-like entity, known as Rumia, was more of a shell that kept on "revolving in endless space," since it was proto-Saturn's circumstellar disk, and not its shining orb, that would have been seen revolving in the blackness of space. And yet, had the egg been the circumstellar disk, it would not have been produced after, but before, the shining of the light as some of the sources noted above actually indicate.

Needless to say, what needs to be ascertained is whether this inconsistency is due to an erroneous interpretation that was somehow reiterated through the ages or to heaven's own past complex emanations.

At this point it might do well to keep in mind that, despite our past claims concerning the accuracy of our ancestors' oral transmissions through the ages, what we finally ended up with happens to be reports that have gone through generations of telling and retelling. It is not that those who witnessed the events in question would not have remembered exactly what was seen, but, for one thing, trying to describe it to those who were born later would not have been an easy matter especially if colleagues sought to gainsay the tellers when it came to minor details. Following that, it would have been even more difficult for those who learned of it from their elder members to repeat it all to even younger listeners long before any of it found its way into writing. Fortunately, most of what really transpired can be collated through the comparative assessment of the universal mytho-historical record from which we have at least been able to reconstruct what follows.

First and foremost is the undoubted association of the cosmogonic egg with ancient man's Saturnian deity. As we have seen, some of man's ancient representations of this deity were made to claim that they, in fact, were the egg. This deity, however, consisted of more than the proto-Saturnian orb. Despite the fact that its circumstellar disk was often assigned its own identity, it was also visualized by some merely as a constituent of the entire deity. Those who claimed that the egg consisted of the primeval chaos were therefore also telling it the way it was. But since the egg had a beginning, whereas chaos, or the circumstellar sea it represented, had always seemed to have been there, we can best understand the egg as proto-Saturn's shrunken disk, the diminishing of which became apparent only after proto-Saturn's blinding flare had ebbed. That, at least, seems what lies behind the belief of those who claimed that the egg was born from Saturn. And yet, following its flare-up, the proto-Saturnian sun itself would also have undergone a drastic change in its appearance, and since this would have given rise to the belief in the re-birth of the god, it could just as easily have been assumed that the god was born from his enclosing egg.

While, at first sight, the above may seem to be just as convoluted as we have claimed the mythic themes themselves to be, what follows will attempt to supply evidential material that will hopefully serve to validate it. Having said that, however, there is still a disturbing item that I, personally, have not been able to explain. Why was proto-Saturn's shrunken

¹ Ibid.

² Compendium of Wong-shi-Shing, as quoted by I. Donnelly, Ragnarok: The Age of Fire and Gravel, republished as The Destruction of Atlantis (N. Y., 1971), p. 210 (emphasis as given).

³ T. Henry, Ancient Tahiti (Honolulu, 1928), p. 336.

circumstellar disk compared to an egg? Why specifically an egg? It is not as if this comparison was offered by just one, or two, individual cultures. As we have seen, it was adhered to just about all over the world, which makes it doubtful that the concept resulted out of mere speculation.

A possible solution, and I only offer it as a suggestion, is that, originally, the proto-Saturnian apparition would have been compared to the contents of a broken egg, with the globe serving as the yolk and its surrounding disk as the albumen. Had that been the case, it would only have been in later retelling that the comparison shifted to an unbroken egg.

Chapter 11

The Spiraling Enclosure

GOD'S CELESTIAL EXCURSION

s an introduction to the event we will now be discussing, let us first understand what lies behind a particular aspect of the Mesopotamian Saturnian deity known as Ea whom we have already met in both this work and its prequels. Known, among other things, as the "god of life," as George Rawlinson shrewdly noted, Ea, whom he renders by his older designation of Hoa, fulfilled "a capacity in which the [cosmic] serpent would again fitly symbolize him." The reason for this stems from Ea's very name which, besides Hoa, can also be rendered Hea, and thus assimilated to the Semitic hiya (hayya or haiya) which means both "snake" and "life."

Together with various other antiquarians, Rawlinson could not offer an explanation why the cosmic serpent was associated with life. "Some say, [it was] because serpents are long-lived," he wrote, "others, because the animal readily formed a circle, and the circle was the symbol of eternity." But, "whatever the reason," he went on, "the fact cannot be doubted." And, to be sure, the very uncoiling of proto-Saturn's plasmatic debris seems to have been understood by some of those who witnessed it as the supplier of life to the former immobile being that was proto-Saturn. Not only was "something," that is the uncoiling spiral, moving across the deity's previous static face—and this is what we are mainly driving at—but the orb itself was seen to shift. It had become endowed with life.

That, to be sure, had been David Talbott's declaration right from the very start of his discussions on proto-Saturn. As he declared in a recorded interview back in 1977: "A number of sources suggest that the solitary god wandered for a time, but eventually came to rest at a stationary point, which is celebrated as the cosmic center." And so, also, only slightly later, when he claimed that: "Saturn himself, once the 'stable,' 'firm,' or 'motionless' god, became the Wanderer." Thus, the Egyptian Creator is made to say: "I found no place whereon I could stand," which Talbott has long understood to refer to Saturn's early wandering.

¹ G. Rawlinson, The Seven Great Monarchies of the Ancient Eastern World Vol. I (N. Y., 1885), p. 79.

² Ibid.; M. O. Howie, The Encircled Serpent (N. Y., 1955), p. 168.

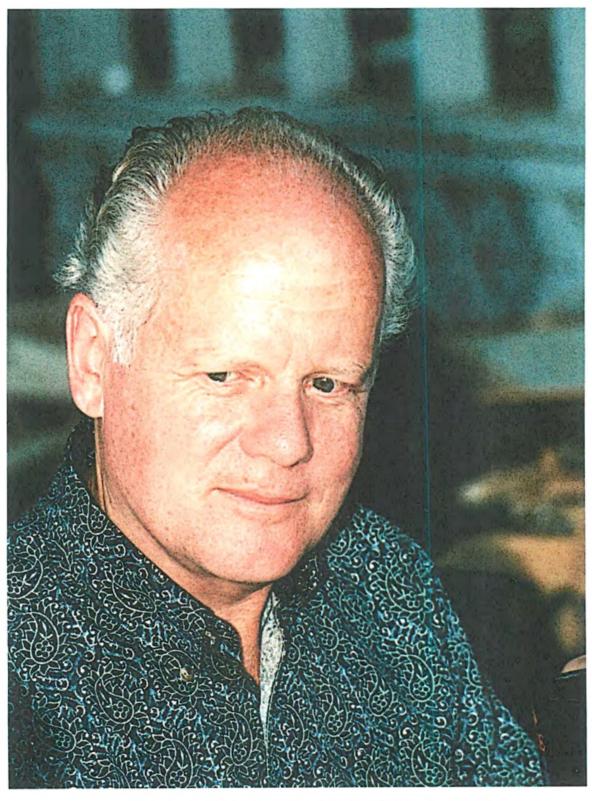
³ G. Rawlinson, op. cit., p. 523.

⁴ Ibid.

⁵ D. Talbott in J. Gibson, "Saturn's Age," Research Communications NETWORK (Newsletter # 3, October 15, 1977), p. 3.

¹ D. Talbott, "Saturn: Universal Monarch and Dying God," Research Communications NETWORK (1977), p. 9. ² E. A. W. Budge, The Gods of the Egyptians, Vol. I (N. Y., 1904/1969), pp. 295, 302; R. T. Rundle Clark, Myth and Symbol in Ancient Egypt (London, 1950/1978), pp. 38, 46; R. Van Over, Sun Songs: Creation Myths From Around the World (N. Y., 1980), p. 273; D. A. Leeming, The World of Myth (N. Y., 1990), p. 18; R. O. Faulkner, The Ancient Egyptian Coffin Texts (Oxford, 2004), p. 184

³ D. N. Talbott, The Saturn Myth (N. Y., 1980), pp. 74-75.



David Talbott—proponent of the Saturnian deity's early wandering. (Photograph—July 2003—by the author.)

Here I have to admit that, originally, I was rather doubtful concerning Talbott's understanding of this particular event since the evidence he had thus far provided did not really clinch the matter. To me, the god's admission that he did not find a place to stand on does not, in itself, mean the god was wandering. The allusion could just as easily be understood as a reference to the re-constitution of the axis mundi, that will be discussed in future volumes, upon which the deity eventually appeared to have come to rest. I was, however, corrected when it was brought to my attention that other Egyptian texts do so present the deity as having wandered, even if only within a limited area. Thus, for instance, in one of the Coffin Texts, the Egyptian Atum was explicitly made to utter the following words: "I have taken my place that I may rest thus from searching and going to and fro and from circling round and round." And so, similarly, where it was described that:

"In the beginning there was only darkness and water. The darkness congealed in certain places and it is from this that the Creator was made. He wandered aimlessly above the water and began to think. He became fully conscious of who he was and what he was to do."²

Somewhat earlier, in Sumer, the god Tammuz, whose character we have analyzed in a previous chapter of this very volume, was referred to as "the wanderer" of what was then conceived to be "the plains of the lower world." As we shall be indicating further on, this lower world, sometimes rendered as the netherworld or underworld, was actually in the sky. And that makes Tammuz having wandered high above in heaven.

When it comes to Hinduism, we come across the Creator as "the self-born lord" who was represented as "a glow-worm" in the primordial darkness where he, too, is described to have originally "moved about with a desire to manifest"

It was not just the Saturnian god himself that was seen to wander about in the sky, but also that which he had created. Thus, despite its eventual metaphysical account, what ended up in the Sathapatha Brahmana came close to the original event. Additional to the fact that the deity known as Prajapati is there identified with the hiranyagarbha, that is the cosmogonic egg of our concern, the deity of that name is said to have begun his existence as the "child of the waters." As it is there recorded: "Verily, in the beginning this [all] was water, nothing but a sea of water...when they [i.e., the waters] were becoming heated, a golden egg was produced" and "this golden egg floated about."

The main interest in the above is that had the cosmic egg really been the shrunken circumstellar disk that encircled the proto-Saturnian orb, it would have appeared to wander around the sky together with its host.

The Yakuts of Siberia also have it that, "in the beginning," the Creator who, among them,

¹ R. O. Faulkner, op. cit., Spell 132 (emphasis added).

² E. A. W. Budge, The Book of the Dead (N. Y. 1913/1960), p. 265.

³ S. H. Langdon, Semitic Mythology, Vol. V of The Mythology of All Races (N.Y., 1964), p. 75.

⁴ Linga Purana I: 59: 6-9 (emphasis added).

⁵ Sathapatha Brahmana XX: 1: 6: 1-2 (emphasis added).

is known as Yryn-Ajy-Tojon, moved "above the boundless ocean," which ocean is by now easily understood as proto-Saturn's circumstellar disk.

It was no different among the Amerinds of the New World as we find it recounted by the Pima of Arizona:

"In the beginning there was nothing at all except darkness. All was darkness and emptiness. For a long, long while, the darkness gathered until it became a great mass. Over this the spirit of Earth Doctor drifted to and fro like a fluffy bit of cotton in the breeze."

The Zuni did not tell it that much differently but, in time, as often happened, the interpretation of this ancient report suffered through later attempts to make it conform with the present celestial realm. Even so, this particular tribe had it that the Creator, known to them as Awona-Wilona, "floated through the darkness carrying with himself the seeds of all existence."

As with other tribal units, the Brulé Sioux ended up misidentifying the *anpetu-wi* of their ancestors as the present Sun. Having come this far in our reconstruction, it does not take much to understand what lay behind their mythic theme concerning Earth's past stellar host. Very much in compliance with our reconstructed history, *anpetu-wi* is believed to have originally "stood idle, fixed in his place from the moment of creation." But then, "suddenly...the sun [that is *anpetu-wi*], began to move" and while moving it "released glowing gases."

And, finally, from Samoa we have it that the God Tangaloa "lived in the far spaces" from where he commenced to create "all things." It is said that, at the time, he was alone while he "wandered about in space."

There might be various other records of this event that we might have missed, but what we have uncovered and presented above should be enough to clinch the matter.

THEORETICAL EXPOSITIONS

As can be seen from some of the snippets we have presented, the deity's wandering is said to have transpired in what has come down to us as "the beginning" in association with Creation. From our point of view, that would actually mean that, having originally appeared to be immobile in the ancient sky, proto-Saturn somehow began to wander. But while that had always been Talbott's understanding, the clarification he offered in later years presented the event in slightly different terms from the way we have been presenting it. Although he

¹ U. Holmberg, Finno-Ugric Siberian Mythology, Vol. IV of C. J. Arnott & G. F. Moore (Eds.), The Mythology of All races (N. Y., 1931/1964), p. 313; see also G. de Santillana & H. von Dechend, Hamlet's Mill: An Essay on Myth and the Frame of Time (Boston, 1969), p. 247.

² R. Van Over, op. cit., p. 28 (emphasis added).

³ H. Hirnschall, *The Song of Creation* (West Vancouver, British Columbia, 1979), Myth #1 (emphasis added).

⁴ R. Erdoes & A. Ortiz, American Indian Myths and Legends (N. Y., 1984), p. 132.

⁵ *Ibid.*, (emphasis added).

⁶ R. Van Over, op. cit., p. 381.

⁷ *Ibid.*, (emphasis added).

⁸ D. Talbott, "Saturn: Universal Monarch and Dying God," Research Communications NETWORK (1977), p. 9.

continued to acknowledge that, "in his earliest remembered state," the god was "inactive" and/or "motionless," he clarified this state to have really referred to the deity's inactivity while appearing to be immobile—and we have to stress this—but not in an axial, or linear, alignment.¹

Talbott's stance was then substantiated by Frederick Hall. Very much as in Lynn Rose's previous configuration,² Hall reverted to a model in which Earth was in a primordial phase-locked equatorial orbit around proto-Saturn that would have left one terrestrial hemisphere perpetually facing its stellar host and thus accounting for the deity's original immobility.³

Hall then assumed that, on entry of this primordial proto-Saturnian system into the Sun's domain of influence, Earth would have flipped head over heels. Thus, still according to him, to terrestrial eyes, Saturn would first have appeared to wander erratically and then, as the coupling effect took over, it would have been seen to spiral slowly in until it achieved its new axial alignment.⁴

THE WOBBLING EARTH

Because of the admitted ambiguity inherent in these particular mytho-historical texts and oral traditions associated with the god's early wandering, mythologists have been at variance, when not entirely dismissive, of the event that these reports attempted to describe. What has, however, come to light from the collective expositions of this particular set of records is that the created "earth" of myth was said to have been rather wobbly.

Despite our disagreements with him on other matters, Marinus van der Sluijs was quite cognizant of this particular issue as his exposition of the subject plainly indicates. "[T]raditional chroniclers of creation would also bemoan the unsteadiness of the original earth, ascribed to the lack of a stabilising pivot or support," he wrote. To which he added: "That the earth was wobbly and infirm in its early days, helplessly surrendered to the mercy of the abyss on which it was tossed about, is repeatedly heard in creation myths." And while he noted that such a concept is to be found in Indian sources, he also tells us that: "Reports from other parts of the world corroborate the notion of a shaky world at the dawn of creation."

Despite what we have managed to reconstruct of Earth's past cosmic history up to this point, the above might be seen by some as overly far-fetched. And yet, the instability that cosmic bodies can be prone to is not exactly unheard of. In fact, the wobbling of the Sunlike star designated HD 52265 by the gravitational, or electro-magnetic, pull of a giant planet has

¹ Idem, "On Models and Scenarios," AEON I: 4 (July 1988), p.7 (all emphases as given).

² L. E. Rose, "Variations on a Theme of Philalaos," KRONOS V: 1 (Fall, 1979), pp. 12 ff.; see also D. Cardona, God Star (Victoria, British Columbia, 2006), pp. 177, 244-246.

³ F. F. Hall, "Solar System Studies," in ibid., p. 26.

⁴ *Ibid.*, pp. 26-27.

⁵ M. A. van der Sluijs, *Traditional Cosmology*, Volume One, "Preliminaries Formation," (London, 2011), p. 135 (emphasis as given).

⁶ Ibid.

⁷ Ibid.

⁸ *Ibid.*, pp. 135-136 (emphasis added).

been said to have been detected by the COROT satellite of the French Space Agency.1

One would have thought that, since the star in question is much more massive than its accompanying planet, the opposite would have been easier to achieve. And yet, as Samuel Warren Carey found no difficulty in proclaiming, under the right conditions, minor cosmic objects can affect the axial orientation of a much more massive one. "Earth must maintain her rotational momentum axis in relation to the fixed stars," he wrote, "except as [might be] altered by [an] extraterrestrial torque." An impact by an asteroid, or so he claimed, could easily supply the required torque "to shift earth's momentum axis permanently," even if "not by much."

One example Carey supplied consisted of the following: "If Ceres, the largest asteroid with a diameter of 1025 km and a mass of 10^{19} metric tons, collided tangentially with the earth, the impact might change [Earth's] axis by about 10° " even if the actual shift might be "much less" than indiscriminately calculated.⁴

Impacts, whether due to asteroids or other types of cosmic rubble, are not, however, the only culprits that have been considered in relation to Earth's possible axial shifts. Without delving into specific technicalities, underwater volcanoes have also supplied scientists with what they consider evidence that "Earth may have wobbled like an out-of-balance ball," an event that, for reasons we need not here go into, they ended up dating to 84 million years ago.⁵

What we have to offer cannot, therefore, be considered atrocious, but let us be clear right from the start. As much as we hold him in great esteem on various other matters, we do not hold to Talbott's contention that, previous to proto-Saturn's axial coupling with Earth, the dwarf sun's apparent stability had to have been achieved through other means. And, needless to say, neither do we hold to Hall's attempted validation of Talbott's view on this matter since, as we have striven to show through geological, glaciological, paleontological, and other studies, Earth had been axially aligned with its proto-Saturnian brown dwarf sun from its very inception.

What we do accept is almost the opposite, in that Earth was temporarily dislodged from its primordial axial alignment with proto-Saturn, even if only to an extent. And, Carey notwithstanding, this would not have been due to impacts, despite the multifarious blows to Earth from proto-Saturn's emitted debris. In actuality, Earth's dislodgement from its axial alignment with its primordial sun would have resulted from proto-Saturn's flare-up. As we have repeatedly noted, and as indicated by brown dwarf flares, this would have been caused by proto-Saturn's bipolar axial discharge, the southern outburst of which would have been unswervingly targeted toward Earth's north rotational pole. It would have been unlikely, to put it mildly, for Earth not to have succumbed to this direct electro/gravitational discharge.

The dislocation suffered by Earth due to this catastrophic emanation would have tended to set it wobbling on its axis much as the mytho-historical records pronounce. But here's the

¹ C. O. Choi, "Wobbly, Sunlike Star Being Pulled by Giant Alien Planet," Space.com (July 30, 2013).

² S. W. Carey, *Theories of the Earth and Universe* (Stanford, California, 1989), pp. 274-275.

³ *Ibid.*, p. 275.

⁴ Ibid.

⁵ Canadian Publiservice Media @ publiservice.gc.ca/media (January 21, 2000).



Brown dwarf bipolar flare. (Illustration courtesy of Hallinan, et al., NRAO/AUI/NSF.)

snag: Worldwide earthquakes and all that would have accompanied them—volcanic eruptions, landslides, hurricanes, and so forth—would have plagued mankind to no end. And, needless to say, no one would need to have been told that the earth beneath their feet was shaking heavily. But that is not the earth that they reported to have been wobbling. The wobbling earth in question—the original earth at the mercy of the abyss that van der Sluijs mentions—would have been the *created* earth of myth, the *celestial* earth, or what in time became misconstrued as the earth, that we discussed in Chapter 9. True enough—and here's the irony—it actually was the undulating Earth that made proto-Saturn and its diminished circumstellar disk appear to wobble and wander about. But due to their lack of knowledge concerning geological and astronomical matters, survivors of the event could not have realized that it was all due to the wobbling Earth beneath their feet. As we have also noted, the so-called creation of this celestial earth is not to be interpreted as the *actual* formation of proto-Saturn. What was essentially witnessed was the spectacular transformation that the proto-Saturnian sun underwent in the wake of its dramatic flare-up. And it was the

transformed—or I should say *still* transforming—proto-Saturnian entity that was seen to wobble and wander around a limited circular area above Earth's north celestial pole.

One aspect of the event that Ken Moss brought to my attention back in 2008,¹ with which I heartily agree, is that the god's wandering in the sky had to have been *relatively* brief for it not to have achieved greater importance in the retelling of the events than can be gathered from ancient man's mytho-historical tit-bits.

THE OUROBÓROS

As we hope to have made clear, those who had witnessed the events we have been describing had absolutely no inkling concerning what was actually occurring in the sky above them. As far as they were concerned, the dim shining sun above their heads had suddenly come to life among a series of visible activities that they could only interpret according to what they were accustomed down here on Earth. Whether through analogy or not, the ancients' understanding of what had really transpired was likened to what they were accustomed in their everyday lives, which, as time went by, ended up confusing those who later attempted to explain what was originally intended. And yet, in some ways, their descriptions were not always entirely alienated from reality. Take, as one example out of many, the manner in which the Maya expressed their understanding of the gap that developed between proto-Saturn and its diminishing circumstellar disk, which disk, as elsewhere in the ancient world was thought of as a circumambient sea. As they had it recorded, their Creator, Hurakan, gave the following command: "Thus let it be done...Let the water recede and make a void..." It was into this void that our primordial sun's emitted debris spiraled into.

The Biblical serpent known as Leviathan, whose name is derived from *liviah*, which means "coiled," "entwined," and/or "serpentine," has received multitudinous explanations down through the ages. Described as a "piercing" and "crooked" serpent, he was said to live "in the depth of the sea," while, at the same time, very much like the serpentine entities of other nations, he eventually became known as "the serpent encircling the world"—none of which should surprise us at this point. Others claim that he formed "a ring around the Ocean," rather than around the world, and, much like Jörmungandr, that he did so by gripping "his tail between his teeth."

In some cases, the emitted serpent was believed to have actually attacked the proto-Saturnian deity. We find this exemplified in Egypt where we meet with the serpent Apep, Apepi, or Apophis, whose name, aptly enough, means "he who was spat out." Having been

¹ K. Moss to D. Cardona, private communiqué (May 2008).

² For Hurakan as proto-Saturn see D. Cardona, op. cit., pp. 438 ff.

³ D. Goetz & S. G. Morley, The Book of the People: Popul Vuh (Los Angeles, 1954), p. 4.

⁴ O. ben M. Feldman, *The Passover Marvels* (Philadelphia, 1978), p. 29.

⁵ See, here, D. Cardona, *Metamorphic Star* (Oregon, 2011), pp. 288-292, 312-314.

⁶ Isaiah 27: 1.

⁷ L. Ginzberg, The Legends of the Jews, Vol. V (Philadelphia, 1968), p. 44.

⁸ *Ibid.*, p. 46.

⁹ R. Graves & R. Patai, Hebrew Myths: The Book of Genesis (London, 1963), p. 48.

¹ F. Fleming, "The Divine Creators," in *The Way to Eternity* (London, 1997), p. 33.



Hurakan in the middle of the gap formed by his diminished encirclement that is represented here by stylized swirls.

(Illustration from a Late Classic Mayan vase as rendered by Karl Taube.)

considered the fiend and enemy of Re or Ra, one well-known incantation warns him to desist:

"O Apep, thou foe of Re, get thee back!...thou shalt not come against Re...he shall triumph over thee [and] thy tail shall be placed in thy mouth..."

And, in a magical rite prescribed for the defeat of Apepi, one had to make the figure of a serpent with its tail in its mouth, stick a knife in its back and cast it upon the ground.² In its turn, this corresponds to a symbolic figure that is found recorded in the *Book of Pylons* that shows a circular enclosure, or disk, on board Ra's boat. Inside the disk is the figure of a beetle, the symbol of Khepera, who was Ra's alter-ego,³ and surrounding the beetle, also known as a scarab, is "a huge serpent in folds, which holds its tail in its mouth." One of the names of the serpent Apep actually translates as "tail in mouth."

The "tail eater" is how the ancient Greeks referred to him, and since, in that language, the name is rendered *ourobóros*, 6 it has, among mythologists, become the accepted designation by which this universal symbol has become known. Others are also fond of referring to this symbolic reptile as the *Worm* Ourobóros.

¹ M. A. van der Sluijs & A. Peratt, "The *Ourobóros* as an Auroral Phenomenon," *Journal of Folklore Research* (January/April 2009), p. 6.

² E. A. W. Budge, The Gods of the Egyptians, Vol. I (N. Y., 1904/1969), p. 272.

³ *Ibid.*, p. 355.

⁴ *Ibid.*, p. 180.

⁵ R. O. Faulkner, "The Bremmer-Rhind Papyrus: IV," The Journal of Egyptian Archaeology, 24 (1938), p. 52.

⁶ H. G. Liddell & R. Scott (eds.), A Greek-English Lexicon (Oxford, 1996), p. 1274.

An ancient Greek tract dictates the manner in which the god Helios should be engraved on a purple gem. While keeping in mind that the ancient Greeks themselves equated Helios with Kronos, that is Saturn, before the name got transferred to the Sun, we note that, according to this tract, Helios should be shown as a "thick-bodied snake in the shape of a wreath" with "its tail in its mouth." As in the Egyptian example mentioned above, a scarab was also to be engraved within the circular coil of the serpent.²

According to the Roman poet Macrobius Ambrosius Theodosius, commonly referred to simply as Macrobius, the Phoenicians pictured the god Janus, whom we have also seen being equated with Saturn, as "a serpent coiled and swallowing its own tail."

The Dogon of Mali in West Africa are likewise of the belief that a serpent lies in the ocean while encircling Earth and holding its tail in its mouth.⁴ So, also, the Fon of Benin, formerly called Dahomey, believe that, in order to keep Earth from sinking into the sea that surrounded it, the Creator asked the snake that carried him to coil itself up with its tail in its mouth in order to support the world.⁵

We do not need to keep pointing out that, originally, the "world" or "Earth" of all these mythological treatises refer to the *celestial* earth, while the "sea" or "ocean" that surrounded it was the proto-Saturnian circumstellar disk of our reconstruction.

Thus, in a similar fashion, the Warao of South America's Orinoco river delta envisage a cosmology in which what they call the Snake of Being encircles the "ocean." And while it is not specifically claimed that the serpent swallowed its own tail, they nevertheless believe that its tail does curve around to meet its head.⁶

In time the *ourobóros* entered early Christian doctrine even though it was eventually rejected by the authorized canon. A trace of the belief persists in the *Acts of Thomas* which was discarded from the sanctioned collection that became the New Testament. In this chronicle, the apostle Thomas is visited by a being in the form of a serpent who describes himself in the following words:

"I am son of him who sits upon the throne and has power over the creation...I am son of him who girds the sphere about; and I am a kinsman of him who is outside the ocean, whose tail is set in his own mouth..."

Moreover, in the *Pistis Sophia*, a Gnostic-Christian text that was compiled somewhere between the 3rd and 4th century A.D., Jesus himself is reported to have said that the "outer darkness is a great dragon whose tail is in its mouth."

¹ F. Boll, "Kronos-Helios," Archiv für Religionwissenschaft, XIX (1916-1919), pp. 343 ff.

² H. D. Betz, The Greek Magical Papyri in Translation: Including the Demotic Spells (Chicago, 1992), spell 12: 274-276.

³ Macronius, Saturnalia I: 9: 9-12; E. G. Suhr, Before Olympos (N. Y., 1967), p. 107.

⁴ W. Corliss, Science Frontiers Book Supplement (November-December 1991), p. 1.

⁵ G. Parrinder, African Mythology (London, 1967), p. 23.

⁶ E. C. Krupp, Echoes of the Ancient Skies (Oxford, 1983), p. 321.

⁷ W. Barnstone (ed.),

¹ Pistis Sophia, 3: 126.



Bas relief from a wall of a palace in Benin that had once been the seat of the king of Dahomey. (Photograph courtesy of the Musée de l'Homme, Paris, France.)

What all this tail-biting amounts to is the mythic interpretation of the manner in which the spiraling emission of proto-Saturn's flaming detritus came to differentiate itself into a distinct encirclement that went down in mytho-history as a ring, or series of rings, around Earth's primordial stellar deity.

Eventually, the *ourobóros*, including the dragon, became associated with various aspects of nature, both here on Earth and in the sky above. Among various other matters, the cosmic serpent eventually became associated with the so-called elixir of life, while evolving into a symbol of mortality, eternity, and unity, as well as the mathematical concept of zero. It was only one small step from that to the very idea of Time and the Universe as a whole.

There have also been those who have proposed that the tail-biting serpent owes its genesis to the actions of actual terrestrial reptiles, among which the armadillo lizard—the Cordylus cataphractus—was singled out by Joseph Needham as a possible living example of the ouroboros. He was, however, wrong when he claimed that, "when disturbed," the lizard in

¹ See, here, for instance, T. Lin, Shinese Myths (London, 2001), pp. 103-104.

² G. Elliot Smith, *The Evolution of the Dragon* (London, 1919), p. 76.

³ R. Kaplan, "On Nothing," Archaeology Odyssey (January/February 2005), pp. 6-7.

⁴ M. A. van der Sluijs, "The Dragon of the Eclipses—A Note," Culture and Cosmos (Spring/Summer 2009), pp. 63-67.

¹ J. Needham, Science and Civilisation in China, Vol. V (Cambridge, 1980), p. 385.

question "holds the tip of its tail in its mouth" in order to protect its soft underside by its curved scaly body. The armadillo lizard does, in fact, curve itself into a scaly ball to protect its underside, but its tail is merely held close to its head and not really in its mouth.

There has even been the odd tale concerning pythons that have, accidentally or otherwise, bitten or swallowed their own tail.²

For one thing, however, tail-biting pythons are much too rare to have initiated the mythology of the *ourobóros*. And, for another, their habitat, much like that of the armadillo lizard, is too far removed from centers in which such mythology became prevalent.

Even so, it is not entirely out of the question that familiarity with such reptiles, the characterization in question of which may have been more widespread in primeval times, could have influenced the metaphoric descriptions of the celestial apparition and the events it led to. After all, mankind *did* try to match what he saw transpiring in the sky to what he was accustomed to witnessing here on Earth. But, to be quite honest with my readers, I very much doubt that this had been the case.

At this point, as much as I really hate to do it, I must, once again, take what van der Sluijs has had to offer on this particular subject. As in just about everything mythology has to offer, which is not at all surprising, his interpretation of the *ourobóros* turns out to be auroral.

AURORAL MANIFESTATIONS

As van der Sluijs points out: "While dancing curtains and cavorting flames are among the most familiar forms of the aurora, ring-shaped formations are also known." In this respect, together with his mentor Anthony Peratt, he resorts to the synchrotron radiation exhibited by Earth's polar auroral discharge column that actually ends up enveloping the entire Earth within its hollow cylindrical tube. Moving from that to plasma experiments that model auroral behaviour in the laboratory, he then zeroes in on photographs that have captured cross-sectional views of the artificially reproduced auroral tube. As he then claims, these cross-sectional views actually "confirm that the corresponding segment of the plasma tube at this stage may have looked remarkably similar to a rotating circular snake devouring its own tail...suggesting that a diocotron instability produced in an intense aurora may have served as the ultimate inspiration for the mythical ourobóros."

To be fair, van der Sluijs presented the above as a "highly speculative theory." And, as he added: "Until specialists in auroral physics are in a position to replicate or to rule out the formation of a ring shaped diocotron instability in the aurora similar to the one apparent in our own experiments, the proposed explanation of the *ourobóros* motif will remain controversial."

¹ Ibid.

² M. A. van der Sluijs & A. L. Peratt, "The *Ourobóros* as an Auroral Phenomenon," *Journal of Folklore Research* (January/April 2009), p. 19.

³ *Ibid.*, p. 22.

⁴ Ibid., p. 25.

¹ *Ibid.*, p. 27.

² Ibid.

Even so, up until the writing of this volume, it remained quite evident that van der Sluijs favored Peratt's auroral model over the planetary scenario presented in this work. This was plainly indicated since, as time went on, he continued to present auroral manifestations as possibly having been the embryonic root behind just about all mythological motifs including "the tail-biting snake." According to him, these are all "global motifs belonging to the so-called 'age of creation' or 'age of the gods' that can be explained as symbolic descriptions of discrete plasma forms seen above the horizon." These, he tells us, would have occurred during episodes of intense auroral storms, according to Peratt's scenario, that he presents as a "promising possibility."

As van der Sluijs himself pointed out, Peratt was not the first to propose such an auroral interpretation of what the ancients described as having seen occurring in the sky above their heads. George Siscoe, who was then Professor of Meteorology at the University of California at Los Angeles, preceded him.⁵ For that matter, as already noted, so did Milton Zysman.⁶ But, unlike Zysman, Peratt, and van der Sluijs, Siscoe did not really interpret universal mythological themes through auroral manifestations. What he did was point to well known associations of the flickering auroral lights with the spirits of the dead, especially those who died in battle, as well as the cavorting souls of unmarried maidens, by the Eskimos and Lapps of the far north,⁷ while suggesting that similar themes might have been indulged in by Paleolithic tribal units.⁸

Van der Sluijs has additionally incorporated into his ever-expanding list of auroral evidence a report that has appeared on NASA's THEMIS Mission Information website⁹ which stated that:

"From prehistoric times, humans have been fascinated by the waxing and waning of auroral lights, the closest and most dramatic manifestation of space phenomena. Spectacular auroral eruptions have given rise to mythological creatures, have driven folklore, and have influenced the course of history, religion, and art."

That, including the little more that is contained in the announcement, however, is a broad generalization bereft of corresponding evidence. One even wonders whether this information

¹ M. A. van der Sluijs, "Divining the Meaning of the Aurora," picture of the day at thunderbolts.info/tpod (July 3, 2009)

² Ibid.

³ Idem, "Plasma Mythology — A Research Program," Chronology & Catastrophism Review (2010), p. 8.

⁴ Idem, "What on Earth...?" picture of the day at thunderbolts.info/tpod (February 15/August 20, 2010).

⁵ Idem & R. J. Johnson, "Geometry of an Intense Auroral Column as Recorded in Rock Art," Journal of Scientific Exploration, Vol. 27, No. 2 (2013), p. 227.

⁶ M. Zysman, "Saturn Myth—A Challenge to the Planetary Hypothesis," KATAKLYSMOS (May 19, 1987), p. 9; idem, "Let There Be Lights," Catastrophism 2000 (Toronto, 1990), pp. 155-156, 158-159, 172, 178 ff.

⁷ G. L. Siscoe, "Solar-Terrestrial Relations: Stone Age to Space Age," *Technology Review* (January 1976), pp. 35, 37.

⁸ *Ibid.*, p. 37.

⁹ M. A. (writing under the name Rens)van der Sluijs, "Go Figure!" picture of the day at *thunderbolts.info/tpod* (August 13, 2013).

¹ L. Jenner, "The History of Auroras," THEMIS Mission Information at nasa.gov/mission (April 25, 2006).

derived from a judicious contemplation of Peratt's own disclosures. But let that be.

One does, however, wonder how an auroral manifestation could have given the appearance of a snake biting its own tail. There is no point in referring to the auroral toroids that form high above Earth's poles due to the impinging of electro-magnetic particles on the terrestrial field. Much like Moe Mandelkehr's Taurid complex formation around Earth, the entire circumference of the auroral toroids can only be viewed from space since they are much too vast to be seen in their completeness from an Earth-bound sector of the sky.

Fair enough, as already indicated, auroral apparitions do sometimes take on smaller circular forms that can be viewed from Earth. These, however, are temporary manifestations, known as coronas, that the fluctuating curtains of light assume when viewed from particular perspective angles. Not only do they come and go in the twinkling of an eye, they also happen to be rare occurrences that could not have given rise to the age-old world-wide distribution of the ourobóric phenomenon.

In the end there are two major aspects concerning dragons and other cosmic serpents that have to be accounted for in any theory that attempts to ascertain their provenance. As we have seen, and as van der Sluijs himself authenticated, these serpents were held responsible for Creation. And since, whatever it was, Creation was believed to have instituted permanence, one is bound to ask: What permanence could a temporary auroral ring have created? Secondly, what part of an auroral ring could have stood for the fire pearl that the *ourobóric* dragon was shown to have encircled, or, for that matter, even chased?

ASTRONOMICAL EXEMPLARS

At this point we have to confess that the evidence concerning the cosmic enclosure that evolved out of proto-Saturn's emitted spiraling detritus is so voluminous that we will not be able to present it in its entirety. And yet, as those who are diligently plowing through these chapters will discover, we will still be filling pages with relevant information concerning it. This is not only because this structure evolved into the most telling aspect of the proto-Saturnian deity, but mainly because of the mesmerizing influence it eventually fostered on humanity that ended up binding most people within a resilient bond that few among the world's population have ever managed to tear asunder. Before we get to that, however, it would serve to quell certain objections were we to offer some astronomical indications in favor of the model that is here being presented.

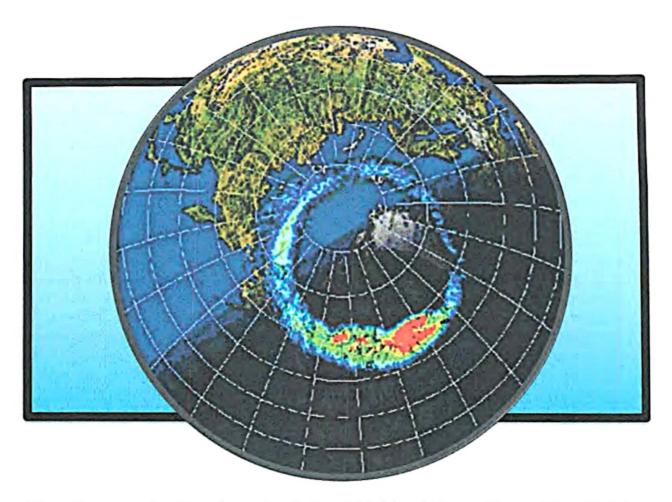
That various types of encirclements are wont to form around stars has been realized for quite some time. As it has been stated: "Although supernovae typically eject most of their debris into interstellar space, a small amount remains gravitationally bound and falls back to form a swirling disk around the stellar remnant." And that such eruptions can leave

¹ See, for instance, the examples supplied by M. A. van der Sluijs, "Plasma Mythology—A Research Programme," Chronology & Catastrophism Review (2010), pp. 5-6.

² Idem, Traditional Cosmology, Volume One (London, 2011), p. 127.

¹ See, for instance, D. Shiga & R. Naeye, "Weird Disks," Sky & Telescope (July 2006), pp. 16-17.

² M. W. Werner & M. A. Jura, "Improbable Planets," Scientific American (June 2009), p. 39.



The northern auroral oval superimposed on the terrestrial globe, which cannot be seen in its entirety from anywhere on the surface of Earth.

undetached narrow rings, rather than a diffused disk, around their host is evidenced by the outstanding tubular band that developed around the supernova dubbed SN 1987A.¹

What was originally described as SN 19897A's double faint ring system, however, in actuality turned out to be the offset angle, due to perspective, at which the two highlighted peripheries of the supernova's hourglass-shaped plasmaspheric expansion are seen from our terrestrial point of view²—and astrophysicists should have realized that right from the start.³ The central loop, however, is the supernova's newly acquired equatorial ring.⁴

Such disks and rings have not only been detected around the remnants of supernovae, but

¹ "Totally Tubular," Discover (February 1992), p. 7.

¹ M. D. Lemonick,"Hula Hoops in Space," TIME (May 30, 1994), p. 43,

² R. Zimmerman, "A Visit to the High-Energy Zoo," Astronomy (January/February 2005 spec. issue), pp. 38-39.

³ See also R. Naeye, "Mystery Loops," Discover (January 1995), p. 35.

⁴ M. D. Lemonick, *loc. cit.*; L. Kruesi, "A Supernova's Colliding Winds," *Astronomy* (December 2005), p. 24; W. Thornhill, "The Z-Pinch Morphology of Supernova 1987A and Electric Stars," *IEEE Transactions on Plasma Science* (August 13, 2007), p. 833; R. Talcott, "Supernova 1987A: 20 Years Later," *Astronomy* (October 2007), pp. 26 ff.

even around the phenomenally less massive brown dwarf stars much as in the case of the proto-Saturnian sun.¹

Even so, one may wonder how an axial discharge from a stellar, or sub-stellar, body can end up as an equatorial enclosure, or series of enclosures, in orbit around the eruptive host. But while such discharges are not yet understood in their entirety, they are quite known to transpire. As noted earlier, a good example comes our way from the eruption of the recurrent nova RS Ophiuchi that took place on February 13, 2006. 2 Judging by the radio waves it emitted together with the images returned by the Hubble Space Telescope, this particular stellar discharge was very much aspherical in its propagation. This has led theorists to the conclusion that, very much like the flare-up from proto-Saturn that is here being discussed, the outburst had to have been bipolar, in other words emitted from oppositely directed axial poles, even though a circular ring ended up hugging it in equatorial orbit. The equatorial encirclement of light from axial eruptions was even exhibited by Kristian Birkeland back in the beginning of the twentieth century through one of his terella experiments that consisted in discharging an electric current toward a magnetic cathode globe suspended in a glass-paneled vacuum chamber. As Birkeland himself described it, the electric rays that manifested themselves both above and below the globe shifted to intersect one another in the plane of the equator where they formed "a strongly luminous ring" that floated in space around the globe.⁴

As we have earlier pointed out, spiraling debris from stellar eruptions are now quite known. Such spirals have long been thought to be ejected through centrifugal force by one star to be captured by another in a relatively close binary. Such a spiral has long been made famous by the just as famous space-illustrator Chesley Bonestell through his various paintings of the spiral said to be ejected by the Beta Lyrae binary. Having been known to the Arabs as Sheliak, and to the Chinese as Tsan Tae, the stellar luminosity that became known as Beta Lyrae was not originally recognized as a double star until John Goodricke, an amateur astronomer from England, made that discovery in 1784. The revolution of the Beta Lyrae stars around each other has now been imaged through the integrated capability of modern instrumentation. However, Bonestell's world-famous paintings notwithstanding, no spiraling matter from the binary has actually been detected as of this writing.

The spirals that have more recently come to light and even imaged are still believed to have been spawned by binary systems. One that has been gaining recognition is the whirling Wolf-Rayet star 104, usually simply rendered as WR 104. The problem in this particular case consists of the fact that only one star is actually detectable while the conjectured second star is believed to be hidden in the bright central region of the visible one.²

¹ M. W. Werner, op. cit., pp. 41 ff.

² S. Starrfield, et al., "Prelude to Disaster," Sky & Telescope (October 2009), pp. 26 ff.

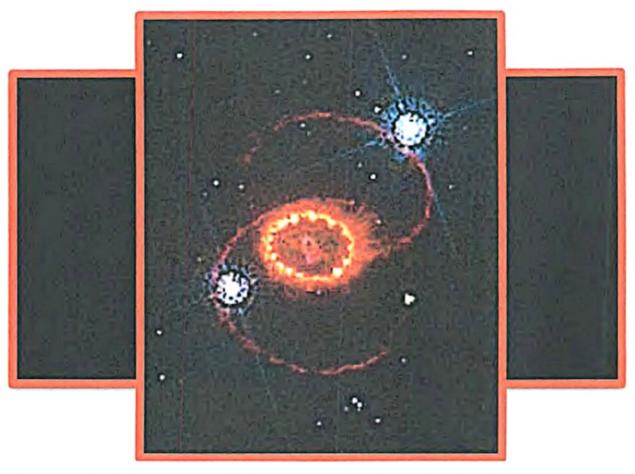
³ *Ibid.*, p. 30.

⁴ K. Birkeland, The Norwegian Aurora Polaris Expedition 1902-1903, Vol. I (London, 1908), p. 671.

⁵ See, as one example, his illustration in L. Barnett, *The World We Live In* (N. Y. 1955), pp. 284-285.

¹ M. Zhao, et al., "First Resolved Images of the Eclipsing and Interacting Binary β Lyrae," The Astrophysical Journal (September 10, 2008), pp. L95-L98.

² P. G. Tuthill, et al., "The Prototype Colliding-Wind Pinwheel WR 104," The Astrophysical Journal (March 1, 2008), pp. 698-710.



Remnant of the 1987A supernova exhibiting the peripheries of its hourglass-shaped plasmasphere and its newly-formed equatorial ring.

NOTE: The two stars that seem to abut the plasmasphere's peripheries are mere coincidental superimpositions due to perspective and not in any way connected to SN 1987A.

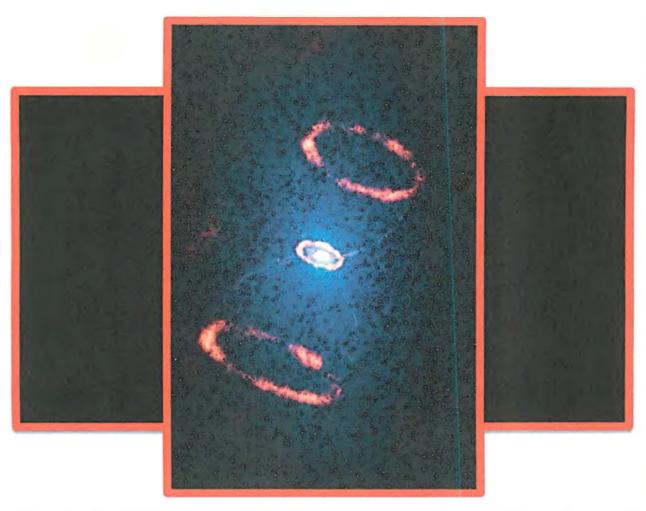
(Image courtesy of NASA.)

When it comes to the spiral from LL Pegasi, officially dubbed AFGL 3068, that we mentioned earlier, a binary companion in an eccentric orbit is also believed to be responsible. At least, in this case, what appears to be a second blurred object in the Keck adaptive images that were obtained through three separate near-infrared filters does seem to be associated with the central star.

The most dramatic stellar spiral that has been imaged at the time of this writing is definitely the one ejected by the giant red star dubbed R Sculptoris that has also been said to have probably resulted from the interaction of a companion star orbiting around it. The reason behind the report's use of the word "probably" is the unenthusiastically admitted fact that no such companion star has yet been detected, which theorized star could only be stated to be hidden. What was additionally surprising, at least as far as those astronomers involved in its

¹ See back to pages 134-135, this volume.

¹ M. Morris, et al., "A Binary-Induced Pinwheel Outflow From the Extreme Carbon Star AFGL 3068," in M. J. Barrow & R. H. Méndez (eds.), Planetary Nubulae in Our Galaxy and Beyond (Cambridge, 2006), pp. 469-470



Perspective view of SN 1987A showing the bright peripheries of its hourglass-shaped plasmasphere as well as its central equatorial ring.

(Artistic representation courtesy of ESO/L.Calçada

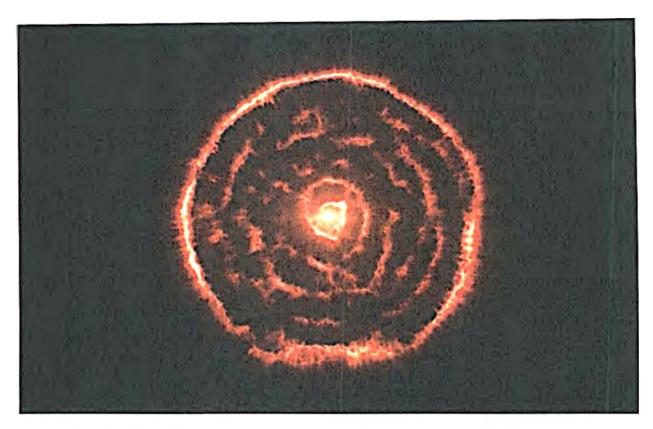
study were concerned, is that the star had somehow ejected far more material than expected.1

R Sculptoris also exhibits a prominent ring at its perimeter within which the spiraling matter is confined. In fact, this outer ring that is now understood as an outer spherical shell had actually been spotted much earlier before the more powerful ALMA array of instruments succeeded in imaging the spiraling debris. Although, as of this writing, it had not yet been distinctly specified, what this outer spherical shell actually amounts to is the bright periphery of the star's encasing plasmasphere.

What we are therefore left with comes to the following: Beta Lyrae is known to be a binary, but, as of this writing, no spiral has been detected emanating from it. Wolf-Rayet 104 does exhibit an ejected spiral, but no companion star has yet been detected. And so, likewise,

¹ European Southern Observatory Science Release, "Surprising Spiral Structure Spotted by ALMA" (October 10, 2012).

Ibid.



The spiraling matter ejected by R Sculptoris within its bright plasmaspheric periphery. (Image courtesy of ALMA —ESO/NAOJ/NRAO.)

in the case of R Sculptoris, the spiraling emission of which is most spectacular, but which, again, is still lacking any evidence of an orbiting companion. In both the Wolf-Rayet 104 and the R Sculptoris case, the culpable companion is believed to be somehow hidden from view. It is only when we come to the spiral issuing from LL Pegasi that a companion seems to have been detected, but only as an indistinct blur through the superimposition of images obtained from an array of special filters. I will not, therefore, say that spiral emissions cannot result from the interactions of orbiting companions in binary star systems. It is possible that some do develop through such means, while others may not. It is, however, worth pointing out that, on entry into the Solar System, proto-Saturn can be said to have become a binary companion in orbit around the Sun. Whether its spiraling emission was due to this association or not remains to be seen.

What can definitely be claimed, however, is that, in more than one way, proto-Saturn's eruption on entry into the Solar System conforms to an incredible degree with the known effects of supernovae. And while, as a sub-brown dwarf star, proto-Saturn's discharge would have been nowhere as close to that of a supernova, it should be kept in mind that, within the restriction of certain parameters, plasmatic occurrences can be scaled up or down, from microcosmic to macrocosmic extents, without losing their intrinsic behavior.¹

¹ See here, especially, D. Cardona, Flare Star (Victoria, British Columbis, 2007), pp. 272-273.

THE ENCIRCLED EGG

It is amazing how much has actually been retained by the African Dogon of Mali when it comes to these primitive events. Investigating past the nuances that have been incorporated into their testimonies by those who have striven to extrapolate what the elders of this particular tribal population have attempted to divulge, one can actually reach a level of understanding that is in keeping with what might actually have occurred in man's primordial sky. It was, for instance, said of Amma, the Dogon Creator, that he was "whirling around" when he came down to "reorganize" what has, as usual, been understood to have been "the world." And that this "world" was believed to have, up till then, been "in chaos," as we have seen, would merely be their way of coming to grips with it having been in the middle of its chaotic circumstellar disk. And yet, still in accord with our developing scheme, the same Amma is believed to have resided in what has been described as "the egg of the world." It was this egg-aduno tal in their language-that was seen to "develop," giving "birth to everything that exists." To top it all, the manner in which the "seeds" of Creation were seen to develop was "in a conical spiral motion." And this continues to be amazing since proto-Saturn's emission, as Vedic tradition stresses, would have issued "from the centre of the sphere," that is its pole, from where it would have spiraled to end up in equatorial orbit. It was, incidentally, for that reason that the cultivated fields of the Dogon were plowed in a spiral pattern in imitation of "the movement of creation."

Now, as it happens, according to the Greek philosopher Anaxagoras, in the beginning, Creation was also said to have been promoted through a whirling vortex, in response to which motion all things came into being.⁸ What continues to be remarkable, however, is that, in a different way, this, too, led to a spiraling oddity in matters relating to cultivation. In ancient Greece, this belief was perpetuated through the traditional spinning of tops during sowing and sowing festivals. As Elmer Suhr fittingly noted, these tops were spun as "a means of encouraging the growth of the seed by imitative magic and implies that germination...is promoted by a whirling or spiral motion." In fact, Suhr's research into this topic led him to the conclusion that the "motion required for creation" had to have been vortical.²

Reverting to the cosmic egg of our present interest, van der Sluijs informs us that "cosmogonic myths from Egypt as well as Oceania" quite often substitute a "surrounding serpent" for the egg in question.³

¹ R. K. G. Temple, *The Sirius Mystery* (N. Y., 1976), p. 49.

² Ibid.

³ *Ibid.*, p. 37.

⁴ *Ibid.*, p. 42.

⁵ Ibid.,

⁶ L. A. Govinda, Foundations of Tibetan Mysticism (London, 1959), pp. 62, 64.

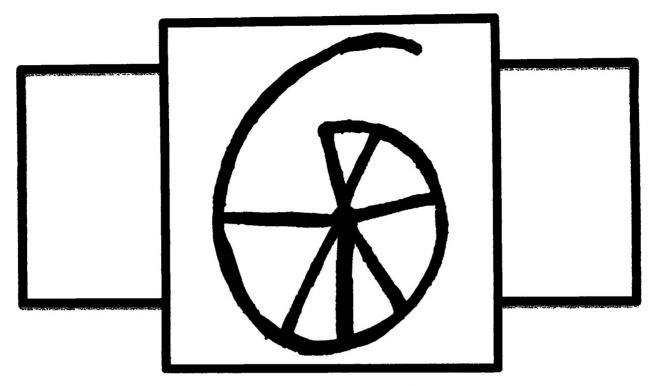
⁷ R. Bastide, "Africa: Magic and Symbolism," Larousse World Mythology (London, 1972), p. 537.

⁸E. G. Suhr, The Spinning Aphrodite (N. Y., 1969), p. 35.

¹ *Ibid.*, p. 36.

² Idem, Before Olympos (N. Y., 1967), p. 128.

³ M. A. van der Sluijs, op. cit., p. 129.



The Dogon's own image of the spiral of Creation.

More than a substitution, however, myths from other countries indicate that this serpentine entity actually coiled itself *around* the cosmogonic egg. As we have already seen, according to Orphic theogony, the god's *pneuma*—"spirit," "soul," or "breath"—in our case, his emission, coiled itself like a snake *around* the egg.¹

Hindu mythology, however, tells us that the cosmic egg was not merely wrapped around, but that its wrappings numbered seven.² And that these seven wrappings around the egg constituted the coils of the celestial serpent was quite known to the Pelasgians, who referred to the serpent in question as Ophion.³

What further clinches the matter is that this sevenfold serpent was not merely claimed to have encircled the cosmic egg, but to have encompassed the deity that had been responsible for its existence. Thus, moving back to India, but this time to Buddhist etiological philosophy, we learn about Muchalinda, said to have been a prodigious cobra, who, "with the coils of his body," ended up enveloping "seven times the blessed body of the Enlightened One."

By the time the event in question found its way into Finland's national epic, the Kalevala, the serpent's seven windings around the egg had been transformed into seven eggs.² And this is not to be wondered at. When one thinks about it, having amalgamated itself with proto-

¹ R. B. Onians, *The Origins of European Thought* (Cambridge, 1954), p. 250.

² J. M. Lundquist, *The Temple* (London, 1993), p. 60.

³ R. Graves, *The Greek Myths*, Vol. I (Harmondsworth, 1964), p. 27.

¹ H. Zimmer, Myths and Symbols in Indian Art and Civilization (Princeton, New Jersey, 1974), p. 67.

² G. de Santillana & H. von Dechend, op. cit., p. 97.

Saturn's diminishing circumstellar disk, the spiral's seven coils could just as easily have been compared to seven eggs.

Coils and undulations were in time amalgamated, if not actually confused, with one another. This became quite apparent among the Maya as dramatically portrayed at the pyramid temple of Kukulkan, which the Spanish nicknamed El Castillo, at Chichen Itza in present-day Mexico. This pyramid was so cleverly constructed that when the equinox Sun shifts toward the western horizon, the banister of El Castillo's north stairway is illuminated in an amazing pattern of light and shadow that dramatically mimics the undulations of the Kukulkan serpent whose head is carved at the very bottom of the staircase. When fully illuminated, the zigzagging sunlit undulations number seven.

THE SEVENFOLD RIVER

As even van der Sluijs noted: "Despite the apparent closeness of concepts, the sources rarely elaborate unambiguously on the chronological relationship between the primordial 'orb' or 'enclosure' and the vaporous 'spiral'." True enough since, as a for-instance, the spiral was also envisioned as itself having been the encircled water. This came about through the overlapping of proto-Saturn's spiraling emission across its diminishing circumstellar disk. Thus, in a different way, the serpent known as Ea, the very embodiment of the spiral under discussion, was envisioned by the Akkadians to have been *born* in the "Watery Deep," which Deep we need not keep stressing as having been the same circumstellar disk.

This is so true that, in the end, the proto-Saturnian deity was himself assimilated to both the surrounding cosmic ocean and the emitted sevenfold spiral that ended up superimposing it. Thus, in Sanskrit, an additional particular name for the planet Saturn is Saptan-Amshupungavah, which is translatable as "seven seas of teeming light beams" or "realms of seven masses of light beams." All of which makes it all the more in keeping with what we have been divulging in that there seems to have been not much of a distinction between the spiral's watery association and its correct identification as a spiraling beam of light. In passing, it should be noted that, in Hinduism, these seven seas, or oceans, have always been taken for granted.

As we have already seen, however, the spiraling emission was also visualized as a river and, in some cases, as actually seven of such rivers. As mentioned *en psaant* in the *Rig Veda*, these "seven mighty rivers" are said to "seek the ocean." Granted that most rivers flow into the ocean, while others flow in and out of lakes, the particular ocean that is, in this instance, associated with the gods Agni and Indra, is once again understood as the circumscribing celestial one. To clinch the matter, in Sumatra, as in various other ancient nationalities, the

¹ M. A. van der Sluijs, op. cit., p. 126.

² See, for instance, C. Calloway, et al., Through Indian Eyes (Montreal, 1996), p. 81.

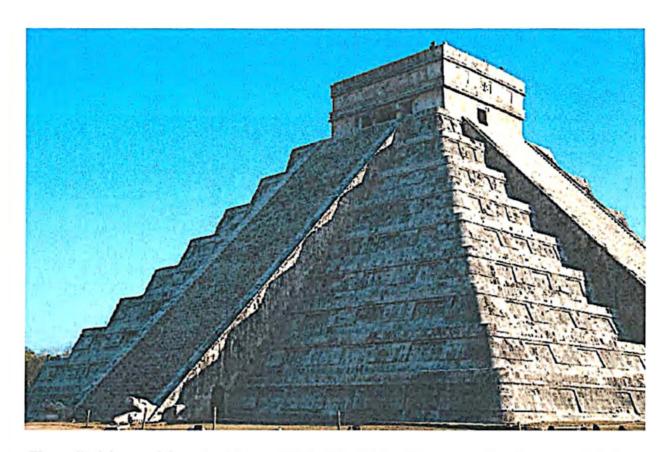
³ M. Oldfield Howie, *loc. cit.* (where Ea and the Akkadians are rendered Hea and Accadians).

⁴ V. S. Apte, the Practical Sanskrit-English Dictionary (Delhi, 1965), pp. 2, 621, 823, 959.

¹ See, for instance, Linga Purana 53: 27-28.

² Rig Veda I: 71: 7.

³ *Ibid.*, I: 32: 12.



The sunlit alabaster of the main stairway of El Castillo, Chichen Itza, representing the seven undulations of the serpent Kukulkan whose head is sculpted at the bottom.

(Photograph courtesy of Shawn Christie.)

seven rivers have long been understood as seven river gods.1

While still in keeping with what we have been surmising, the Tibetans ended up with a version of Creation in which the sevenfold waterway under discussion became featured somewhat differently. Rather than plowing through complex Buddhist etiological texts that would bury most readers in a veritable philosophical mire, we present excerpts from one of the works by the American astronomer Edwin Krupp who is also known for his expertise in the investigation of the world's intricate mythology. "Tibetan Buddhism," he has clearly stated, "offered its own more abstract vision of the creation of the world, and it clearly steered away from the earlier animist notions." And although Krupp himself was, at least to an extent, embroiled within the multifarious folds of Buddhist philosophy, he was still able to zero in on that religion's belief in an "impromptu presence" in whatever had existed before Creation. To an extent, what he was then able to exhume from the Buddhist tenets under consideration turn out to be our old standby, the "primordial ocean." Additionally rendered

¹ F. M. Schnitger, Forgotten Kingdoms in Sumatra (Leiden, 1964), p. 187.

¹ E. C. Krupp, Skywatchers, Shamans & Kings (N. Y., 1997), p. 89.

² Ibid.

³ Ibid.

simply as "the waters," this ocean is then said to have "started to churn." Whatever was "created" through this churning ended up being "ringed by a lake," which lake turned into seven more circular ones that "complete the concentric topography" of whatever was created.²

Looked at in any way one would want to, we still end up with what can best be comparatively described as "the sevenzoned watery sky" that the Greek epic poet Nonnus vouched for in his Dionysiaca.³

1 Ibid.

² *Ibid*. (Emphasis added.)

³ M. A. van der Sluijs, *Traditional Cosmology*, Volume Four (London, 2011), p. 29.

Chapter 12

Ceremonial Celebrations

THE RITUALIZATION OF THE PAST

eligion is inseparable from the rituals in which it is actually embedded. And yet, as the famed anthropologist Mark Aldenderfer found reason to stress: "Little or no consensus exists as to the definition of ritual, religion, and cult, nor is there much agreement on appropriate theoretical constructs useful in their study no matter how they are defined."

He did, however, go a wee bit too far when he added that "because religion sits at the nexus of social, cognitive, and behavioural domains, no single theoretical perspective can nor should hope to capture what religion and its material representation 'mean'."²

In that respect I have to admit that Alfred de Grazia came much closer to the truth in his declaration that "religious rite is aimed at rehearsing and repeating the original cosmic order," even though I would rather have emphasized the original cosmic events. This attempted ritualized repetition, de Grazia rightly claimed, was aimed "to support and control" the cosmic order, or, in other words, to pacify the deities and keep them from continually harming humankind through the cosmic catastrophes they had been known to cause. And that, to be sure, has been noted by other researchers into the subject from centuries ago down into the present. Thus, for instance, we can point to Nicolas-Antoine Boulanger (1722-1759) whose research clearly revealed that "all the major festivals and mystery plays of antiquity" are based on Earth's past catastrophic events, as we can also, among others, point to Julia Hegewald, whose twenty-first-century study of Jain rituals stressed their cosmic symbolism.

Despite our disagreements with James Frazer's point of view as far as comparative mythology is concerned, we are not blinded to the fact that he was also shrewdly cognizant of myth's abiding influence on religion. When it comes to rituals and religious ceremonies he was definitely on the ball in his intuitive perception that traditional lore is often much closer to what transpired in the past than what ended up preserved in priestly dogmas.³

¹ M. Adenderfer, "Bringing Down the Mountain: Standing Stones on the Northern and Central Tibetan Plateau, 500 BCE—500 CE," in D. A. Barrowclough & C. Malone (Eds.), Cult in Context: Reconsidering Ritual in Archaeology (Oxford, 2007), p. 244.

 $^{^2}$ Ibid.

³ A. de Grazia, Chaos and Creation (Princeton, N. J., 1981), p. 110.

⁴ Ibid.

¹ G. Heinsohn, "Imaginary and Expected Catastrophes: Apocalyptic Desire and Scientific Prognosis," Chronology and Catastrophism Review, XVII (1995 Special Issue), p. 22.

² J. A. B. Hegewald, "Images of the Cosmos: Sacred and Ritual Space in Jaina Temple Architecture in India," om D. Ragavan (ed.), *Heaven on Earth: Temple, Ritual, and Cosmic Symbolism in the Ancient World* (Chicago, 2013), pp. 68-72.

³ J. Frazer, *The Scapegoat* (London, 1913), p. 404

What it all amounts to, as Mircea Eliade emphasized, is that ritual is based on "a divine model," or what he called "an archetype."

All of this, of course, has been known for quite some time. What is not always stressed enough, as Edwin Oliver James noted, is that what happened "in the brave days of old at the beginning of the present order is of practical importance because it had a permanent effect on subsequent behaviour and the structure of society and its institutions."

Ritual has also been described as a most efficient method for communicating with whatever divine being one believes to exist beyond life.³ But even that is hardly the entire picture. John Lundquist, who offered the above categorization, went further in his discussion by pointing to ritual dramas that offered live performances based on myths of Creation.⁴ But even then he had to include the additional initiation into the "mysteries of the afterlife." As he found reason to stress, "creation and death were the two grand themes" enacted in dramatized temple rituals.⁶

At the present, most rituals are more concerned with guaranteeing a better life in the next world than with what transpired at Creation. But that the events connected with Creation were responsible for the original trust behind the universality of religious rituals, as Ev Cochrane indicated, has been demonstrated, if not confirmed, by "numerous anthropologists familiar with indigenous cultures" from just about all over the globe.⁷

There is then the attempted appeasement of the deities that goes all the way back to the early religious rites of Sumerian times. As Uri Gabbay, who then hailed from the Hebrew University in Jerusalem, noted: "According to the ancient Near Eastern religious perception, one of the most important things a person can ask from a god...is for this god to remain calm." As he then added: "Divine wrath is terrible and, if not calmed in time, can be directed toward the god's own city, temple, and people." Or so, at least, it was believed.

Disagreements on other issues aside, Marinus van der Sluijs is just as mindful when it comes to the sanctification of these past events. Rituals, according to him, serve to back up the very myths of origin we have been expounding on. As he wrote, it is through the performance of rituals and holy festivals that traditional knowledge has been "continuously and cyclically rehearsed in the conscious memory" of participants.⁴

¹ M. Eliade, Cosmos and History (N.Y., 1959), p. 21.

² E. O. James, Creation and Cosmology (Leiden, 1969), p. 3.

³ See, for instance, J. M. Lundquist, *The Temple: Meeting Place of Heaven and Earth* (London, 1993), p. 20.

⁴ *Ibid.*, p. 23.

⁵ Ibid.

⁶ Ibid.

⁷ E. Cochrane, On Fossil Gods and Forgotten Worlds (2010), p. 243.

⁸ U. Gabbay, "'We Are Going to the House in Prayer': Theology, Cultic Topography, and Cosmology in the Emesal Prayers of Ancient Mesopotamia," in D. Ragavan (Ed.), Heaven on Earth: Temples, Rituals, and Cosmic Symbolism in the Ancient World (Chicago, Illinois, 2013), p. 223.

¹ *Ibid.*, p. 224.

² Ibid.

³ See also, D. Cardona, Metamorphic Star (Oregon, 2011), pp. 29-30.

⁴ Marinus (writing under the name Rens) van der Sluijs, "Do Chinese Whispers Affect Myths?" Chronology & Catastrophism Workshop (2010:1), p. 34.

Concerning all of this, the Hindus have it right on the mark in their belief that rituals instruct them to "do what the gods did in the beginning." Whatever it was that "the gods did," they believe, should also be done by them. Nor are the Hindus alone in this respect. The Australian Aborigines are also of the belief that they must do what the primeval gods did and prescribed in the beginning. And the first thing that man remembers his primal god to have done in what he recorded as "the beginning" was the shedding of the brilliant light we have been dwelling on.

THE FESTIVAL OF LIGHT

Festivals commemorating the shedding of the light at the inception of Creation are known from various ancient cultures. Due to a much later event that we must leave for a future volume of this unfolding series, however, the resultant celebrations eventually amalgamated with those that were held to welcome the New Year, which amalgamation has not escaped the notice of mythologists. Despite the fact he did not actually believe that any of the primordial events we have been describing ever took place in real time, Mircea Eliade, for one, could not fail but notice that festivals commemorating "the repetition of the creation" cannot be entirely divorced from "communal ceremonies for the New Year." In time, it became somewhat difficult to separate one from the other, especially since the New Year festivals in question were just as directly associated with proto-Saturn as the earlier shedding of the light festivities had been. In the following excursion, short as it must necessarily be, we shall attempt, as best we can, to demarcate the ambiguous line between the two.

One of the earliest of these rituals that has come down to us concerns the Babylonians who are known to have celebrated a seven-day-long festival in commemoration of the inauguration of the temple dedicated to Ningirsu, the same as Ninib and therefore Saturn, the god who was said to have "changed darkness into light." The reason behind the seven-day-length of this celebration stems from the seven days it was said to have taken the proto-Saturnian deity to bring his Creation to fulfillment. As it is written in that Judeo-Christian book of books: "And on the seventh day Elohim ended his work which he had made."

A celebration that originated in memory of the light that was emitted at the onset of Creation continues to be adhered to by devout Parsis up to the present on the sixth day of Farwardin. As al-Biruni stated, this day is "for the Persians a feast of great importance" since it was on that day that "God finished the creation." It was also on that same day, as it was said, that "God created Saturn," or, in our case, brought proto-Saturn into prominence.

This pre-Islamic feast continues to be celebrated not only in Iran—that is what was once Persia—but everywhere that Iranians, Afghanis, Kashmiris, Kurds, and Zoroastrians have

¹ Satapatha Brahmana, VII: 2: 1: 4.

² Taittriya Brahmana, I: 5: 9: 4.

³ E. O. James, op. cit., p. 4.

⁴ M. Eliade, Patterns in Comparative Religion (London, 1996), pp. 404-405.

⁵ M. Jastrow, Jr., Die Religion Babyloniens und Assyriens (Giessen, 1905), pp. 56 ff.

Genesis 2: 1.

² Al-Biruni, The Chronology of the Ancient Nations (London, 1879), p. 201.

³ Ibid.

settled through the ages. As witnessed in this writer's domicile, the city of Vancouver in British Columbia, thousands of Iranians gather on this particular day at one of the city's beaches where fires are lit and everyone, including women and children, is expected to leap over the top of the flames in a symbolic act of cleansing and renewal.¹

It has, however, to be admitted that the continuation of this festival is actually due to its amalgamation with the later New Year celebration. Thus Farwardin, the month on which it now takes place, is the first month of the Iranian calendar and so commemorates the beginning of the year. For that reason the festival is known as Naw Ruz—or Nauroz, as sometimes transliterated—which means "New Day." This holy month falls between March and April of the western calendar and is thus marked as the beginning of spring. And yet, the reason the festival takes place on the sixth, rather than the first, of Farwardin, as would betoken a New Year festival, is because the deity, as noted above through al-Biruni and also known from Genesis, is said to have finished Creation on the sixth day, having actually rested on the seventh.²

Since fire, and therefore also lamps, was one way in which ancient man was able to produce light, it was turned into one of the most appropriate symbols of Creation. Thus, in India, the taking possession of an area, an act that was regarded as "a repetition of the creation," was "confirmed" by "the erection of a fire altar." But even that, in time, amalgamated with New Year festivals since fire altars eventually came to symbolize the year.

The most popular Hindu festival in relation to Creation is the festival of lights known as Diwali, which word itself signifies "a row of lights." Celebrated every year in the fall, or autumn, the festival originated in commemoration of light's victory over darkness. Homes are cleaned and decorated in preparation and, on the night of Diwali, participants dress up and light a series of candles or lamps called *diyas*, both in and out of their homes, and participate in prayers. In modern days, fireworks sometimes follow. As in the Christian festival of Christmas, gifts are usually exchanged between close friends and family members.¹

One curious Chinese festival also involves rows of lights set in bowl-shaped earthen vessels that are additionally decorated with paper flowers. These are then carried in a procession in the company of priests to the banks of a river on the water of which the lamps are placed and set afloat.² This ceremony could possibly have risen in commemoration of the brightly illuminated celestial river that was seen emanating from proto-Saturn's polar center. In time, however, this festival merged with the Feast of the Dead and eventually came to commemorate that particular ritual to the exclusion of any other.³

A Festival of Lanterns, known as Bon Matsuri, during which lamps were also floated on the waters, was likewise celebrated in Japan in remembrance of a great catastrophe at the

¹ M. Van Nimwegen, "Persians Get Fired Up to Mark New Year," The Vancouver Sun (March 22, 1993), p. C5.

² Genesis 2: 2-3.

³ M. Eliade, op. cit., p. 405.

⁴ Sathapatha Brahmana, VI: 5: 1 ff.

¹ All too well known to require references.

² F. S. Dobbins, Error's Chaoins: How Forged and Broken (N. Y., 1884), p. 653.

³ G. Jobes & J. Jobes, Outer Space: Myths, Name Meanings, Calendars from the Emergence of History to the Present Day (N.Y., 1964), p. 340



Chinese water lamp ceremony.

culmination of the seven stars known as the Pleiades, which star cluster originated as a surrogate for the proto-Saturnian enclosure of light. Eventually, as in China, this festival also merged to become one with the Feast of the Dead.

Cambodia, too, is known to celebrate the Feast of the Dead through the floating of miniature boats on rivers.²

Among quite a few modern countries, the festival of lights continues to be held in Berlin, Germany, during the month of October, where thousands—some say millions—of visitors have been known to attend. The Berlin cathedral and various other landmarks are colorfully illuminated while lamps can be seen floating in the water basin next to Potsdam Square. Various events, including musical performances, all of which are somehow connected to the theme of light, take place during the celebrations.³

The knowing reader may wonder why two of the most prevalent Saturnian festivals, the Greek Kronia and its Roman equivalent, the Saturnalia, have been skipped over in the above excursion. This is not merely because these two festivals stressed the inauguration of the New Year, but mainly because they treat of issues pertaining to Saturn's so-called Golden Age that

V. Raghavan, Festivals. Sports and Pastimes of India (1979), p. 169.

See here D. Cardona, "The Mystery of the Pleiades," KRONOS III; 4 (Summer 1978), pp. 24 ff.

² J. G. Frazer, Adonis, Attis, Osiris (London, 1906/1961), pp. 61-62.

³ The Associated Press, "Shining City Tells Many Stories," Metro (October 11-14, 2013), p. 20.

we have not yet touched upon. And yet, even when it comes to New Year festivals, Victor Clube and Bill Napier hit the nail right on the head in their statement that they also "came to symbolize new life, perhaps the aftermath of calamity," and that they "acquired strong associations with fertility rights and rebirth." Although not quite spelled out by them, the "new life" and "rebirth" they alluded to in "the aftermath of calamity" falls perfectly in line with the commemoration of proto-Saturn's transformed appearance, its regenerated brilliance, following its flare-up.

So, likewise, to an extent, Cottie Burland when he also rightly claimed that the "theme of light after darkness is the key to all midwinter celebrations in the northern hemisphere," even though, as with other mythologists, he erringly attributed the aim of such rites as an invocation for the return of the Sun following the winter months.²

What must be kept in mind is that these festivals, together with the ones discussed below, evolved from simpler behaviors and that, even in their former simplicity, none of them would have been inaugurated anytime soon following proto-Saturn's flare-up. It took a while. Additional to that, it must also be kept in mind that the year had not yet come into being. In fact there was still nothing up in the sky, or anywhere else for that matter, that would have enabled man to keep track of time. The reason these festivals have been discussed at this particular point is to stress the impact these events ended up having on mankind.

THE EATING OF ENTRAILS

It was not all lights and merriment. As we discussed in our previous volume, proto-Saturn's spiraling discharge was visualized by some as the god's disemboweled intestines.³ Among the Assyro-Babylonians this gave rise to the disemboweling of animals by priests in order to divine future events.

"If when 'reading' the entrails (a practice known as extispicy) the priests observed something unexpected or unusual, they noted the anomaly and its [supposed] meaning with simple clay models that would allow future priests to understand and interpret the omen."

As is to be expected, this custom was not restricted to the Assyro-Babylonians. Much long afterwards, the Bretons, who hailed from the region of Brittany in France, were known to have washed their altars with the blood of sacrificial prisoners and to have "consulted the gods through the entrails of human victims." And this was "in no way an act of reprisal or vengeance in their view but simply the execution of a religious rite."

What turned out to be worse was the actual sacrifice of human beings in order to devour their entrails. This came about because the merging of proto-Saturn's uncoiling debris with its

¹ V. Clube & B. Napier, TRhe Cosmic Serpent (London, 1982), p. 242.

² C. A. Burland, Myths of Life & Death (N. Y., 1974), p. 247.

³ D. Cardona, Metamorphic Star (Oregon, 2011), pp. 302, 310-311.

¹ "Strata Answers," Biblical Archaeological Review (March/April 2013), p. 62, illustration on p. 15.

² E. Anati, Camonica Valley (N. Y., 1961), p. 176.

³ J. Vendryes, La Religion des Celtes (Paris, 1948), as cited by E. Anati, loc. cit.

shrinking circumstellar disk was envisioned by some as the god's swallowing of his own intestines. This was so true that, in order to be assimilated with the gods in heaven, dead Egyptian pharaohs were expected to emulate the deities. Consequently, as it is engraved on the walls of his own pyramid, the dead Unas was not only assimilated to the bull of heaven, an avatar of Osiris, but was declared to rise in the heavens "like a god" where, among other matters, he was expected to feed on the gods' entrails.

"One of the strongest proofs that the Egyptians in the Dynastic Period had no horror of cannibalism is proved by a chapter in the text on a wall inside the pyramid of King Unas...In this the dead king...hunts the gods in the meadows of the sky, and his helpers snare them, stab them, disembowel them, cut them up, and cook them for him. He then eats three full meals a day, at morning, noon, and night, and devours their hearts and entrails till he can eat no longer."

As it was actually written:

"Unas is the bull of heaven—Who rages in his heart—Who lives on the being of every god—Who eats their entrails."⁵

As Wallis Budge tells us: "This text was so popular that another copy of it was cut on a wall inside the pyramid of [the later] Teta...who wished, apparently, to emulate the exploits of Unas."

Even so, one may argue that this eating of entrails is reported to occur following the pharaoh's death and not in reality here on Earth. In a way, one can say that it was no different than the symbolic eating and drinking of Jesus' body and blood by Christians through the ordinance known as the Eucharist and/or Holy Communion. As far as pharaonic Egypt was concerned, that might have been quite true. It was certainly otherwise elsewhere in the world.

According to the Jewish historian Flavius Josephus, the Graeco-Egyptian sophist known as Apion claimed that the Seleucid king Antiochus Epiphanes came across a Greek in the temple of Jesusalem who was being fattened in order to be slain according to a ritual in which the temple attendants would end up eating his entrails. The Greek philosopher Democritus then adds that this rite took place once every seven years. William Heidel tells us that "one need not in any way believe that these reports are true; but they nevertheless require an explanation." Even so, as he goes on: "We may plausibly conjecture that there was some—to

¹E. A. W. Budge, Osiris and the Egyptian Resurrection, Vol. I (N. Y., 1911/1973), pp. 397 ff.

² Idem, The Gods of the Egyptians, Vol. I (N. Y., 1904/1969), pp. 33-35.

³ *Ibid.*, p. 39.

⁴ Idem, Osiris and the Egyptian resurrection, Vol. I (see above), p. 175 (emphasis added).

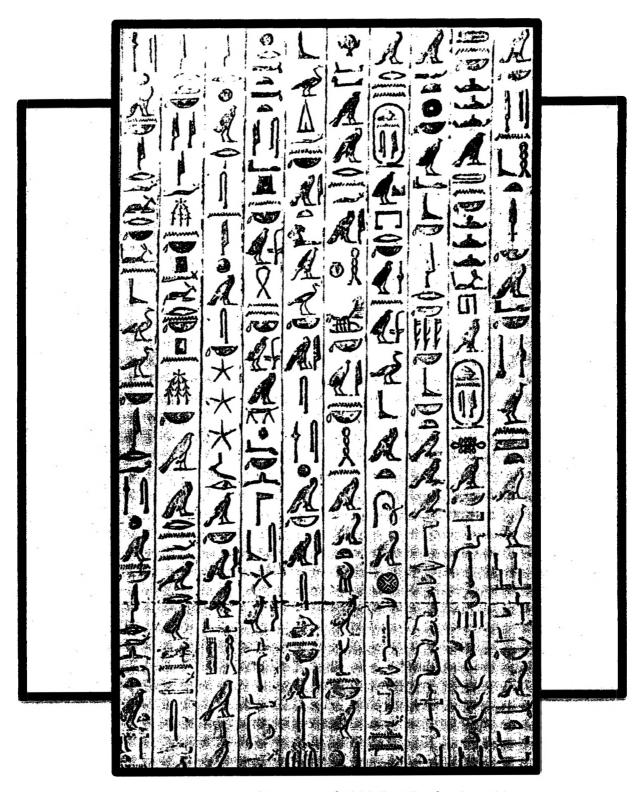
⁵ M. Lichtheim, Ancient Egyptian Literature, Vol. I (London, 1975), p. 36.

⁶ E. A. W. Budge, loc. cit.

¹ Flavius Josephus, Against Apion, II:7.

² W. A. Heidel, *The Day of Yahweh* (N. Y., 1929), p. 308.

³ *Ibid.*, p. 309.



Text in the pyramid of Unas, parts of which describe the pharaoh's ascent to heaven and his eating of the gods' entrails.

(Photograph courtesy of Princeton University.)

us unknown—basis for the report of Apion in a rite practiced by Semites, whom he or his authorities identified with the Jews."

Although we shall never know whether the Israelites did practice such rituals, it must not be forgotten that they did practice human sacrifice,² as neither must it be assumed that none of these rites were devoid of cannibalistic tendencies.³ In the meantime, the Semitic Canaanites, who were the Israelites' neighbors in the land of Canaan, did practice the devouring of sacrificial human intestines.⁴

Mankind's endeavors in commemorating what took place in ancient times are not always crystal clear, and the resulting ritualization of these events by different societies are sometimes contradictorily executed. In some instances, as among the aboriginal tribe of India known as the Khonds, the eating of entrails was actually abhorred. Sacrificial victims were still cut to pieces, often while still alive, but their heads and bowels were actually left untouched.⁵

Although it was not applied to human beings, one cannot say that such abhorrence affected ancient Greek mentalities when it came to analogous sacrificial activities. In their case, what they sacrificed was a bull that would still have been a facsimile of the Saturnian deity, whose tongue and entrails were burnt and eaten in a solemn feast. What is highly interesting, however, is that this was a procedure that has been said to have represented an event that "took place in the sky," the *mimesis*—that is imitation—of which "was the basis of Greek artistic theory and especially of tragedy" that was "designed to prevent a recurrence" of past cosmic threats.¹

CIRCUMAMBULATION AND THE SACRED DANCE

Diodorus Siculus wrote that Osiris took great pleasure in dancing.² Shiva was also known as Nataraja—Lord of the Dance. He was said to dance the *tandava* when he destroyed the world, but, significantly, he was also said to have danced at its creation.³ When Shiva dances, matter is believed to appear around him in the form of an encircling band or halo. More importantly, this encircling matter was itself said to have danced. "And [this] matter dances, appearing round about him as an aureole of fiery emanations."

What this dance alludes to is the undulations that proto-Saturn was seen to undergo due to its apparent slight dislodgement plus the circular motion that its emitted debris was seen to experience at the onset of Creation. Both these motions gave rise to various rituals of circumambulation and dancing in the round as man attempted to emulate the antics of the god above his head.

¹ Ibid.

² Isaiah 57:4-5; Jeremiah 7:31, 19:5.

³ Ezekiel 16:20, 23:37.

⁴ Wisdom 12:1-5 (Douay version).

⁵ J. G. Frazer, The Golden Bough: The Roots of Religion and Folklore, Vol. I (N. Y., 1890/1981), p. 387.

¹ H. Crosthwaite, "The Etruscans and Their Language," Chronology & Catastrophism Workshop (1990: 2). p. 8.

² Diodorus Siculus, Bibliotheca Historica, I:18.

³ A. K. Coomaraswamy, "Dances of the Gods," Encyclopaedia Brittanica, Vol. 7 (1959 edition), p. 21.

⁴ M-G. Wosien, Sacred Dance: Encounter With the Gods (London, 1974), p. 7.



Shiva Nataraja within his fiery halo. (Photograph courtesy of the Metropolitan Museum of Art.)

As Eliade tells us, "every ritual has a divine model, an archetype," while Maria-Gabriele Wosien describes this ritualistic sacred dance as the result of just such an archetype.

"The myths of man speak of the creation of the world as the dance of God...The creator is seen as the 'unmoved mover' behind events in the cosmos, the still point around which everything must turn..."

Among man's various endeavors, the dance and circumambulation—the walking or running around a site or holy object—is seen by some to have been his earliest art form.³ As it has been said, man's earliest ritual was the dance.⁴ Personally, I would say "close, but not quite," since, while I shall not be adamant about it, I do think that the original festival of light would have preceded ritual circumambulation.

Even so: "The continuous coming face-to-face with the divine centre was celebrated in the ritual encircling of sacred sites, objects or persons, as well as in round dances around a holy centre. To circumscribe the centre was to be in constant relationship with the source of being."

Thus: "At most times, for most people [the dance] has been the central concern of their lives; from it have later emerged all the arts."

What is more important, among the various and sometimes complex movements of the dance, it is *circular* dancing that is considered to be the oldest.⁷ And also: "Every dance, in imitating the characteristics of the deity adored, is a mimed metamorphosis that seeks to change the dancer into a god..."

As we have already indicated, man, who was frightened out of his wits by the proto-Saturnian outbursts at the onset of Creation and all the catastrophes that followed, sought to placate the responsible god by imitating his actions. "The emancipation of man in relation to his god is achieved through imitation of him; and man himself turns creator in doing what the gods do."

Moreover: "The imitation of god works the alchemy of transmuting fear into rapture." Thus, by imitating god, not only was the deity placated, fear itself was subdued. By appearing to become god, man actually discovered ecstasy. God then was no longer to be feared. A demonic entity was thus transformed into a benign deity.

As it is now realized, long after the event, the mystery of Creation continued to be enacted through dancing.

¹ M. Eliade, The Myth of the Eternal Return (London, 1955), p. 21.

² M-G. Wosien, op. cit., pp. 7-8.

³ *Ibid*., p. 8.

⁴ *Ibid.*, p. 13.

⁵ *Ibid*., p. 21.

⁶ *Ibid.*, p. 14.

⁷ *Ibid.*, p. 17.

⁸ *Ibid*., p. 9.

⁹ Ibid.

¹⁰ Ibid.

"As a symbolic representation of a primordial event, the dance is performed with careful attention to detail...Ritual dancing is never aimed at an audience, but rather involves all those present; the rite itself is addressed exclusively to the divinity."

One actually wonders how much of these primeval events the human mind still conceals. Man's collective unconsciousness does seem to strive at times to reveal what it has known since what it itself has rendered as "the beginning." Ancient imagery is often resurrected in the descriptive language of those who seek to explain man's ancient beliefs. Even when ignorant of the actual events that lie behind the occult rituals the meaning of which they still strive to unravel, writers, without being consciously aware of it, often describe, in detailed imagery, that which their *conscious* mind seems to have suppressed. Wosien, for instance, surely did not have Saturn and its encirclements in mind when she penned the following:

"The beginning of both time and creation pertains to the centre. From this focal point manifestations radiate out in concentric rings."²

Notice with what exactness she described the proto-Saturnian experience, even to the radiation of the spiraling debris as "concentric rings" into which, as we shall see, they did eventually develop, as well as the associated "beginning of time and creation" since, as we shall also be eventually documenting, man's telling of time did originate through the further developments of the rings in question. As she continues: "This universal experience has found expression in the many circumambulation rites and round dances of the sacred traditions of the world." And, together with other intentions, these ancient rites, "occurring in different branches of the Indo-European family," as well as elsewhere, "consisted in making the circuit of the object intended to be honoured, or sanctified."

We can thus travel around the entire world, from the remotest antiquity to the present, and marvel at the consistency with which both men and women adhered, as they continue to adhere, to this ancient rite.

CEREMONIAL ENCIRCLEMENT

In the Hebrew *Talmud*, the principal manual of Rabbinic Judaism, dancing is described as having been the principal function of the angels. The idea of these heavenly beings circling the throne of God goes back to the very beginning of Hebrew culture. Much later in time, Basil the Great, bishop of Caesarea—also known as St. Basil (fourth century A.D.)—could still ask: "Could there be anything more blessed than to imitate on earth the ring-dance of the angels?"

Call me naive, but one thing that continues to amaze me concerning the above is Gustave

¹ *Ibid.*, p. 13.

² *Ibid.*, pp. 21-22.

³ *Ibid.*, p. 22.

⁴ E. G. d'Alviella, Symbols: Their Migration and Universality (N. Y., 1894/2000), p. 67.

⁵ M-G. Wosien, op. cit., p. 29.

⁶ Ibid.

Doré's rendition of this particular theme among his dramatic illustrations of Dante Alighieri's Divine Comedy. It was not, however, after I had seen ALMA's view of the spiraling matter ejected by R Sculptoris—see back to page 189—that I realized how close he had come to what ancient man would have seen spreading above his head.

What is of more importance in respect to our study is that this band of celestial beings were also made to dance around the Angel of the Sabbath. That angels were originally thought of as being synonymous with stars, or, more correctly, celestial entities, is not the atrocious statement it might appear to some. The Angel of the Sabbath can thus also be referred to as the *Star* of the Sabbath. That the Sabbath, or Saturday, is Saturn's Day, need not be repeated. As is widely known, but not always acknowledged, the word "Sabbath" derived from "Shabtai," the very Hebrew name for the planet Saturn.

Let us go further. Just as proto-Saturn's emitted debris was remembered as having been sevenfold in its spiraling encirclement, so did ancient cultures perform rites involving the sevenfold circumambulation around holy sites or objects. In one of the earliest rituals of which we still have documentary evidence, we find Babylonian priests circling exactly seven times in procession around their ziggurats as also around other sacred precincts. Prayers, in the form of hymns, accompanied with music, were sung by the officiating priest during these circumambulating processions. "At times," Uri Gabbay has noted, "the spatial aspects of the content of the prayers and the ritual instructions prescribing their performance (or a combination of both) appear to correspond to the general theological, and on occasion also cosmic, significance of the prayers." As it was chanted, these circumambulating processions accompanied with prayer were performed in honor of Enlil. That Enlil was an aspect of the god An, or Anu, as well as Shamash, is well known, and that these divine aliases stood for the Saturnian deity need no repeating.

All in all, it has been aptly demonstrated that the "most instructive evidence" from ancient documents that are now in our possession involves the circumambulation of sacred sites, and, more than that, even the processional circumambulation of cities. It is unfortunate that, because of the circular directions these ancient processions were wont to follow, most mythologists have understood their circumambulations as having risen in accord with the present Sun's trajectory across the sky, although no explanation is ever supplied for the encirclements' sevenfold derivation.

In some of these early rites the statue of the god was taken off its enshrined throne and carried in the procession around the city wall to be returned to its shrine or temple. What this symbolically represented was the god's desertion of the city, leaving it in chaos, and his return

¹ L. Ginzberg, The Legends of the Jews, Vol. I (Philadelphia, 1968), p. 84.

² M. Knapp, Antiskia: Ein Beitrag zum Wissen um die Präzession im Altertum (Basel, 1927), pp. 33-36.

³ R. R. Stieglitz, "The Hebrew Names of the Seven Planets," *Journal of Near Eastern Studies* (April 1981), pp. 135-137.

⁴ U. Gabbay, op. cit., p. 223.

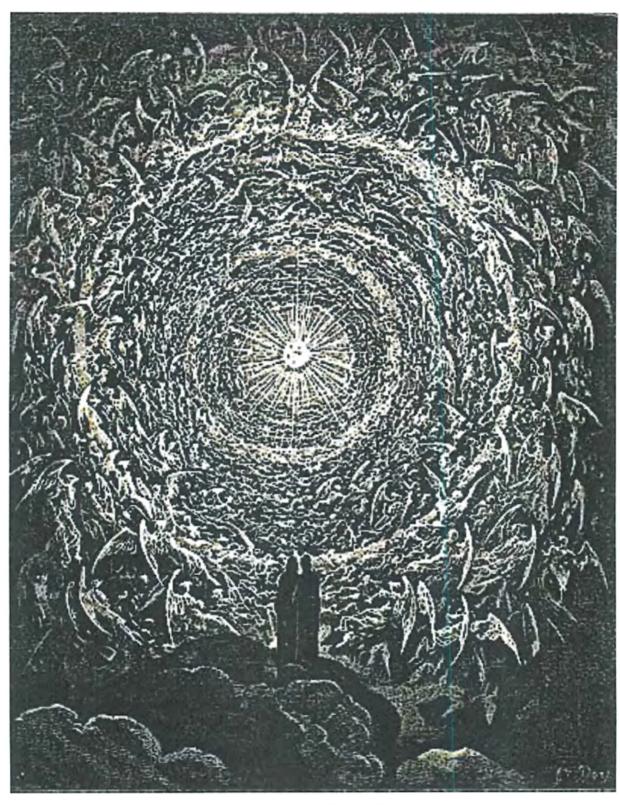
⁵ *Ibid.*, p. 226.

⁶ S. H. Langdon, Semitic Mythology, Vol. V of The Mythology of All Races (N.Y. 1931/1964), pp. 93, 61, 63.

⁷ U. Gabbay, op. cit., pp. 235-236.

⁸ *Ibid.*, pp. 237-238.

⁹ *Ibid.*, pp. 238, 239.



Circling dance of the angels. (Illustration by Gustave Doré.)

to it in order to restore its former stability. It was then that the god was "asked in supplication to stay calm" once he was re-seated on his throne.

Thousands of years later such processions continue to be performed, especially among Christians, and notably among Catholics. Ritual processions, consisting of costumed fraternal organizations and priests in their fineries, carrying standards, lanterns and candles, leave the parish church to trudge in a sluggish double file ahead of the enshrined sacrament and the statue of the city's patron saint around the parish to return back into the church. Moreover, with the exception of the one held in memory of the risen Christ, these processions are usually held late in the evening close to night so that all the candles and lanterns can be lit, thus turning the entire circumambulation into its symbolic ring of light.

The circumambulation of city walls as an entreaty to the deity continued down through the ages. When the Israelite leader Joshua ben Nun wished to invoke the might of Yahweh in his attack on Jericho, he ordered his men, both priests and warriors, to circle the city seven times.

"And seven priests bearing seven trumpets of rams' horns...went on continually, and blew with the trumpets: and the armed men went before them... so they did six days. And it came to pass on the seventh day, that they rose early...and compassed the city after the same manner seven times...and the wall of the city fell down flat"²

Since sacred images were forbidden to the Israelites, what the priests carried in lieu thereof during the circumventing of Jericho was the ark of the covenant, a chest that contained certain sacred objects including the stone tablets on which Moses had carved the ten commandments. The carrying of statues in processions, however, must have been a common sight to the Israelites during their lengthy stay in Egypt since, as in other ancient cultures, temples in that country were allotted divine protection while being built through a circumambulation in which images of the gods were carried around the site.³ Not only that. but the ark itself and its use, both as a sacred shrine and rallying standard, was merely a facsimile of Egyptian sacred barques. A good example comes from Thutmose III who travelled with a portable shrine of the god Amon in his military campaigns. As Ian Wilson indicated, "Egyptian armies paraded before it, regarding it as their divine protection, in a manner reminiscent of the Israelites' subsequent use of their ark." And: "Like the Israelite ark, the Egyptian one could be opened only by specially privileged persons, in this case the pharaoh and his most senior priests." In fact, although it has been variously depicted, the ark of the covenant does bear a striking similarity to the barque of Amon-Ra as depicted in the temple of Karnak. While the Biblical description has the ark topped by two winged angelic beings known as cherubim, Amon-Ra's barque is crowned with two winged female divinities of truth known as Maat that, to the uninitiated, could easily pass for the traditional representations of cherubim.

¹ *Ibid.*, p. 240.

² Joshua 6: 13-15, 20.

³ J. M. Lundquist, op. cit., p. 14.

⁴ I. Wilson, Exodus: The true Story Behind the Biblical Account (N. Y., 1985), p. 146.

⁵ Ibid.



The sacred barque of Amon-Ra as depicted in the Karnak temple

It does not matter that the destruction and conquest of Jericho by the Israelites never took place, or, if it did, not so miraculously. It matters even less that the ark of the covenant could not, in our opinion, have been imbued with potent electrical energy, if not even radioactivity, that was capable of physical destruction as Jewish sources and Biblical scholars have tried to show. What does matter in the present study is the age-old belief in the divine potency inherent in sevenfold circumambulations. In a profile-raising sort of way, the practice has even been imposed on modern visitors to the Karnak temple of Amon, in Egypt, where tourists are asked to circumvent a broken column seven times before leaving the once-sacred site.

Circumambulation was also conducted at the 9th century Buddhist temple of Borobudur in Java, Indonesia, before it was abandoned no one known exactly when or why. It was, in fact, the dance of Creation that was commemorated at this magnificent shrine through its circumambulation during which mantras were chanted by the faithful. Known in India as pradakshina, the religious circumambulation around sacred sites and objects continues to

¹ L. Ginzberg, op. cit., Vol. III, p. 157; A. de Grazia, God's Fire: Moses and the Management of Exodus (Princeton, N. J., 1983), p. 33; G. R. Harvey, "Stories of Radioactivity and Mutations," Chronology & Catastrophism Workshop (1991 #1), p.13; D. Salkeld, "Old Testament Tales—Part V: Moses as Magus 'B'," Chronology & Catastrophism Review (2004:3), p. 41.

² M-G. Wosien, op. cit., p. 24.

¹ E. G. d'Alviella, loc. cit.

be practiced by Buddhists in various parts of the world.¹

As is widely known, the pre-Islamic Arabs, including Bedouins, worshipped a multitude of gods. The worship of each of these gods was much the same as that of any other. Besides offerings and sacrifices, a processional circumambulation, known as a tawaf, was also organized around each temple.²

The tawaf was not eliminated with the introduction of Islam. To this day, the Moslems still run en masse seven times around the Ka'aba in Mecca— three times at a brisk pace and four times more slowly. Ibn Arabi taught that the Ka'aba becomes animated by those who circumambulate it.³ As it is also believed, he who circles around the Ka'aba becomes as one with "the angels surrounding the throne of God."⁴

The sevenfold circumambulation of the Ka'aba dates from before the prophet Mohammed's inception of Islam.⁵ It is no secret that the Ka'aba had been a "pagan" shrine before Mohammed took it over. Nor was the one in Mecca the only such place of worship in Arabia. There were Ka'abas at Najran, Khalasa, and San'a, each one of which used to serve as the centre of a sevenfold tawaf.⁶

According to François Lenormant, the Ka'aba's main idol, that was later destroyed by Mohammed, was a wooden dove suspended from the ceiling. Since the dove was a symbol of Venus, Lenormant considered the pre-Islamic cult of the Ka'aba as having been devoted to that planetary goddess.⁸ Most Arabian writers, who would have known better, however, had it differently. According to them, within the Ka'aba, or perched upon its roof, 10 stood the figure of the god Hubal who was considered the greatest of all Arabian idols. As Hildegard Lewy pointed out, Hubal was the god of the planet Saturn, 11 which is not to say that the dove of Venus was not also worshipped there.

For some now forgotten reason—but see our proposition in a previous volume of this series¹²—the cube, which is what the Arabic word ka'aba actually means, had been a tradtraditional representation of Saturn from ages past. The cube, in fact, had been the characteristic shape of Saturnian temples.² The Arabian historian al Masudi did not hide the

¹ E. C. Krupp, Skywatchers, Shamans & Kings (N. Y., 1997), p. 21; see also T. Miller, "Naturalizing Buddhist Cosmology in the Temple Architecture of China: The case of the Yicihui Pillar," in D. Ragavan, Heaven on Earth: Temples, Ritual, and Cosmic Symbolism in the Ancient World (Chicago, 2013), p. 25.

² G. Annequin, Little-Known Civilizations of the Red Sea (Geneva, 1979), pp. 207, 208.

³ M-G. Wosien, op. cit., pp. 101, 254.

⁴ *lbid.*, p. 101.

⁵ J. Huxley, et al., The Ancient World (London, 1968), p. 96.

⁶ H. st. J. B. Philby, "Mecca," Encyclopaedia Brittanica (1959 ed.), Vol. 15, p. 150B.

⁷ F. Lenormant, Lettres Assyriologiques (1871-1872), Vol. II, pp. 138 ff.

⁸ Ibid.

⁹ Tabari, Annals, or more correctly, Tarikh ur-Rasul wal-Muluk, which translates as: History of the Prophets and Kings, Vol. I (Leiden, 1881-1882), p. 1075.

¹⁰ H. Lewy, "Origin and Significance of the Mâgên Dâwîd," Archiv Orientalni, 18, Pt.3 (1950), p. 340.

¹² D. Cardona, op. cit., pp.228-229.

¹G. de Santillana & H. von Dechend, Hamlet's Mill: An Essay on Myth and the Frame of Time (Bosrton, 1969), pp. 221-222.
² H. Lewy, *op. cit.*, p. 339.

fact that the pre-Islamic Ka'aba in Mecca used to be a shrine to Saturn. Circumambulation around the Ka'aba—any Ka'aba—must therefore have been symbolic of a circumambulation around Saturn.

In the 2nd century A.D., Lucian referred to circular dancing as "the round dance of the stars, the constellation of planets in relation to the fixed stars." The Roman poet was naturally drawing on the beliefs of his more ancient forebears. In his day, the role proto-Saturn had played at the beginning of time had long been forgotten but the connection of the sacred dance with the heavenly luminaries was still retained. More than that, the dance was still being related to the Creation. "With the creation of the universe the dance too came into being..."

Despite their conversion to Christianity, present-day Mexicans still revere their ancient deity Quetzalcoatl, otherwise known as the Plumed Serpent, the Aztec equivalent of the Mayan Kukulkan. In Chiapas, Tzotzil Maya continue to dress up as Quetzalcoatl while they dance in circles.⁴

In her in-depth study of the subject, Wosien could not help but follow in the footsteps of previous mythologists when it came to explicating what lay behind man's ancient fervent, not to say fanatical, passion with circumambulation and dances in the round. Like others before her, she could best relate these circumambulating dances as having been in imitation of the Sun, the Moon, and the planets. So, for instance, did she interpret the dance of the North American Navajo Indians as a Sun dance. The Sun, however, moves through the sky. Why, then, was the centre of this dance thought of, and represented by, a fixed spot?

As Wosien herself informs us: "Celestial motion being circular, man, by imitating it, partakes of the cosmic dance-round and begins to experience reality as order round a centre: the ancestral god is he who is immovably centered." The Sun, however, is not "immovably centered." It was the proto-Saturnian orb that could lay claim to this most elevated position.

What is also symbolic from our point of view is that the Navajo sun dance, as Wosien also tells us, is actually performed at night. This dance, if that is what it should be called, involved a race of white-painted men around a blazing fire. As the contestants circle around, each member clutches a burning torch with which he strives to strike the one ahead of him while attempting to avoid being struck by the one behind him while they all circle ever closer to the central fire. Referred to as one of the most impressive Amerindian ceremonies, this Navajo ritual continues to draw tribesmen from far and near. As it has been noted: "The many rituals, jugglery acts, prayers and songs under the stars combine the gaiety of a social gathering, the solemnity of a religious ceremony [and] the spectacle of a tribal drama."

¹ Ibid.

² M-G. Wosien, op. cit., p. 8.

³ Ibid

⁴ N. Baldwin, Legends of the Plumed Serpent (N. Y., 1998), p. 171; see also J. L. Gardner, Mysteries of the Ancient Americas (N. Y., 1986), p. 295.

⁵ M-g. Wosien, M-G. Wosien, op. cit., p. 20.

⁶ Ibid.

⁷ Ibid.

⁸ M. W. stirling, *Indians of the Americas* (Washington, D. C., 1965), p. 101.

¹ Ibid.

The Mandan Okipa ceremony, on the other hand, is less frivolous and requires great stamina—vigor, courage, you name it—by those elected for the ceremony. Having been witnessed and described in painstaking detail by the famed American artist, George Catlin, we have a pretty good picture of the horrors that the participants went through, even prior to what they themselves referred to as the last race. Catlin did not pull punches when he described the cruelties that were inflicted on the participants, even after they themselves had already undergone a series of self tortures, prior to their excruciating circumambulatory ritual.¹ Suffice it to say that, "pale and ghastly, from abstinence and loss of blood," each participant, with weights skewered to his breast, is taken by the hands by two of his comrades and "dragged with all possible speed," around an inner ring formed by another group of circumambulating dancers who are not themselves being tortured.² To use Catlin's own description of the ceremony:

"In the commencement of this dance or race they all start at a moderate pace, and their speed being gradually increased, the pain becomes so excruciating that [the] languid and exhausted frames [of the dragged participants] give out, [even though they continue to be] dragged by their wrists until they are disengaged from the weights that were attached to their flesh, and this must be done by such violent force as to tear the flesh out with the splint, which (as they say) can never be pulled out endwise, without greatly offending the Great Spirit and defeating the object for which they have thus far suffered."

"In this 'last race,' which was the struggle that finally closed their sufferings, each one [continued to be] dragged until he fainted, and was thus left, looking more like the dead than the living: and thus each one lay, until, by the aid of the Great Spirit, he was in a few minutes seen gradually rising, and at last reeling and staggering, like a drunken man, through the crowd (which made way for him) to his wigwam, where his friends and relatives stood ready to take him into hand and restore him."

As Catlin found reason to state:

"I am ready to accord [the Mandan] in this particular [practice], the palm; the credit of outdoing anything and everybody, and of enduring more than civilized man ever aspired to or ever thought of. My heart has sickened also with disgust for so abominable and ignorant a custom, and still I stand ready with all my heart, to excuse and forgive them for adhering so strictly to an ancient celebration, founded in superstitions and mysteries, of which they know not the origin, and constituting a material part and feature in the code and forms of their religion."

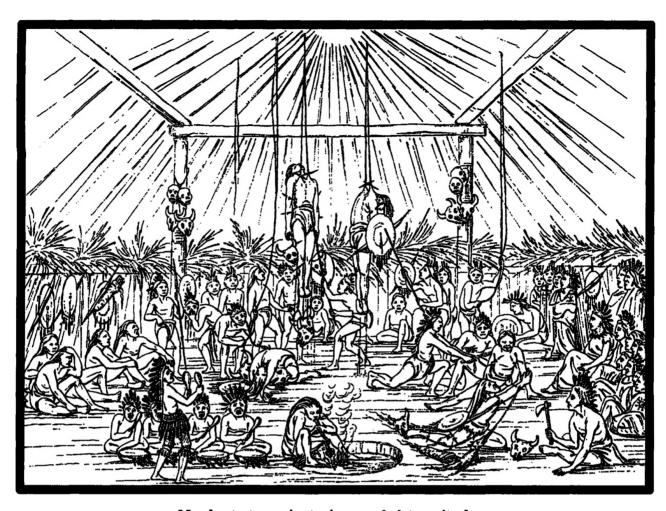
¹ G. Catlin, Letters and Notes on the North American Indians, Vol. I (North Dighton, Mass., 1995 reprint), p. 191.

² *Ibid.*, p. 196.

³ Ibid.

⁴ *Ibid.*, pp. 197-198.

¹ Ibid., p. 199; see also, J. A. Maxwell (ed.), America's Fascinating Indian Heritage (Pleasantville, N. Y., 1978), p. 164.



Mandan torture prior to circumambulatory ritual. (Illustration by George Catlin.)

Quite understandably, the ceremony was outlawed in 1890, but, as Benny Peiser noted during a talk he gave at the 1994 autumn meeting of the Society for Interdisciplinary Studies, the intensity of the ritual seems to reflect great traumas in the tribe's ancient history brought about through cosmic catastrophes.¹

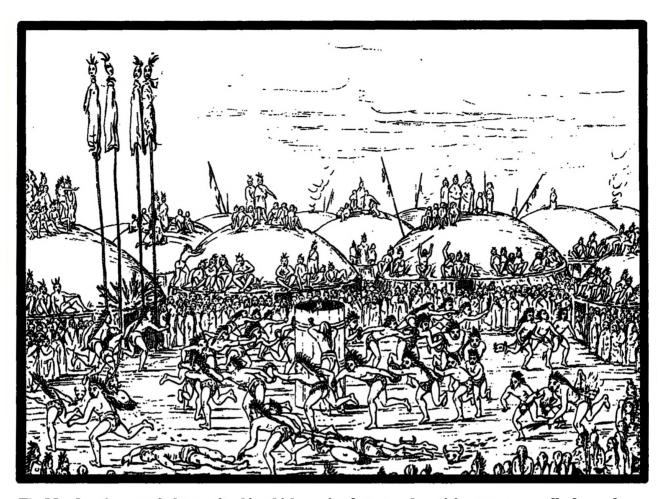
The round dance of the Algonquins was nowhere as drastic as that of the Mandan. Celebrants merely danced around a circle constructed of elaborately carved posts each of which was topped by the image of a human head while others waited their turn to join in.²

There were and, in some cases, there still are various other dances in the round conducted by various other Amerindian tribes, the descriptions of which would require much more space without adding to what we have already documented.

A circumambulatory procession was also held in Hawaii in honor of Lono, the god of the sky. This was inaugurated when the Pleiades, very much as in the Japanese festival of lanterns

¹ A. Beal, "Autumn Meeting," Chronology & Catastrophism Workshop (1994; 2), p. 4.

² J. A. Maxwell, op. cit., pp. 115, 117.



The Mandan circumambulatory ritual in which previously tortured participants were cruelly dragged around until they fainted on the ground.

(Illustration by George Catlin.)

mentioned above, became visible in the evening sky. At that point a lengthy procession in which the image of Lono was carried began to circulate around Hawaii to the accompaniment of singing, dancing, and other festivities. As already pointed out, and as will be indicated later on, the star cluster of the Pleiades was chosen by some of our ancient ancestors as a surrogate for the Saturnian planetary deity.

CHRISTIAN CORRELATIONS

I hope no one who reads these words will follow Catlin in thinking that these rites were simply the results of primitive superstition—although even here it all depends on what one understands by "primitive" and "superstition." As already hinted at when it comes to candle-lit processions, the association of the round dance with Creation continued down into Christian times. Aurelius Ambrosius—sanctified by the Catholic Church and now known

¹ F. Fleming, "Polynesian Paradise," in C. Westhorp (ed.), *Journeys Through Dreamtime* (Amsterdam, 1999), pp. 114-115.

mainly as St. Ambrose—the fourth-century bishop of Milan and one of the greatest Fathers of the Church, wrote:

"And just as he who dances with his body, rushing through the rotating movements of the limbs, acquires a right to share in the round dance, in the same way, he who dances the spiritual dance, always moving in the ecstasy of faith, acquires a right to dance in the ring of all creation."

To be sure, and most modern-day Christians will be surprised at this, the earliest Christian ritual that we know of is the so-called Dance of Jesus, a rite of initiation that was still being practiced in the fourth century A. D. The apocryphal Acts of John, of which only fragments have been preserved by Eusebius Pamphili, Athanasius, and a few others, traces the origin of this rite to Jesus himself. In this dance, Jesus is said to have stood in the middle while the twelve apostles walked around him in a circle.

"He [Jesus] bade us therefore make as it were a ring, holding one another's hands, and himself standing in the midst he said: Answer Amen unto me...And we, going about in a ring, answered him: Amen."²

Animosity between different sects of Christianity has caused bitter wars and mass exterminations. But even non-violent competitions between different nationalities of the same sect, as between the Greek and Armenian members of the Eastern Christian sectarianism, have led to mild disputes. One particular dispute between these two factions in Jerusalem was eventually reconciled, even though it led to fraudulence in an attempt to coerce the faithful into submission. This came about through the celebration conducted in memory of the Holy Fire that was said to have descended upon the apostles of Jesus following his resurrection. The celebration took place at the Basilica of the Resurrection in Jerusalem, which church supposedly harbors the tomb of Jesus, and therefore also his place of resurrection, and is included here mainly because of the uncontrolled circumambulation that used to take place around the supposed sepulcher of Jesus. As described in 1697 by the famed traveler Henry Maundrell, who was also a clergyman in the Church of England, serving as a chaplain in Syria, the church was "crowded with a numerous and distracted Mob, making a hideous clamour very unfit for that sacred place, and better becoming Bacchanals than Christians."

More to the point:

"They began their disorders by running round the holy Sepulcher with all their might and swiftness, crying out as they went, *Huia*, which signifies *this is he*, or *this is it*; an expression by which they assert the verity of the Christian Religion. After they had by

¹ M-G. Wosien, op. cit., p. 26.

² *Ibid.*, p. 28.

³ H. Maundrell, A Journey from Aleppo to Jerusalem at Easter A. D. 1697 (Oxford, 1714), pp. 94 ff., as quoted by E. W. Hopkins, "The Cult of Fire in Christianity," in J. D. C. Pavry (ed.), Oriental Studies in Honour of Cursetji Erachji Pavry (Oxford, 1933), p. 147.

these vertiginous circulations and clamours turn'd their heads, and inflamed their madness, they began to act the most antick tricks and postures, in a thousand shapes of distraction."

Additional to that, and very much as in the last race of the Mandan, at times, those taking part in this crazy ceremony ended up dragging one another along the floor.²

As for the clergymen themselves, they, too, engaged in circumambulation. First came the Greek priesthood that was immediately followed by the Armenians in a concentrated procession around the sepulcher in which both clergies were boastfully accompanied with "all their Gallantry of Standards, Streamers, crucifixes and Embroider'd Habits." And here is where the first of two fraudulent activities were perpetrated. As Maundrell described it:

"Toward the end of this procession, there was a Pigeon came fluttering into the Cupola over the Sepulcher; at sight of which, there was a greater shout and clamour than before. This Bird, the Latins told us, was purposely let fly by the Greeks, to deceive the people into an opinion that it was a visible descent of the Holy Ghost."

The second deceit was less spectacular and yet it was viewed as being much more dramatic. What it consisted of was the following. First and foremost, all the candles and lamps in the basilica were extinguished. The Suffragan of the Greek Patriarch and the Principal Armenian Bishop entered the central separate construction known as the aedicule that supposedly houses the tomb of Jesus, and disappeared behind closed doors, at which point, the "exclamations [of the congregation] were doubled, as the Miracle drew nearer to its accomplishment." Less than a minute later, a glimmering of light was observed through some chinks of the aedicule's closed doors "and certainly Bedlam itself never saw such an unruly transport, as was produced in the Mob at this sight." After that, the crowd continued to press forward in their fanatical desire to light their candles from the supposed miraculous flame that was brought out of the aedicule "it being esteemed the most sacred and pure, as coming immediately from heaven."

There will be some who will shrug this off as an unfortunate parody that would have been understandable, even if not commendable, in the seventeenth century when Maundrell witnessed it. The truth, however, is that the ceremony as described by him continues to take place in its entirety up to the present once a year at Easter where the ignition of the flame within the sepulcher continues to be counted as the longest-running miracle of all time.

Although not as wild as the circulatory madness at the Church of the Holy Sepulcher in Jerusalem, circumambulation remains an integral part of Christian dedicatory ceremonies,

¹ *Ibid.*, p. 148.

² Ibid.

³ Ibid.

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

very much as with temples in ancient times. Thus, in order to consecrate a new church, bishops are required to make three complete circuits around it, and seven separate circuits around the new altar within the church.¹

EN PASSANT

"Ritual," stated Neil Baldwin, "has the reassuring power to bring forth religious feelings born in ancient times, allowing us to experience them in endless cycles as if for the first time."²

That these circulatory rituals owe their origin to the sevenfold encirclement of the proto-Saturnian deity has not escaped the notice of other researchers into these matters. Thus Georgia Balbin could not help but shrewdly note that the Saturnian encirclement has been "recorded again and again in ancient culture" under various different, but recognizable, motifs.³ As she added: "The rings of Saturn provide the objective basis for forms of circular worship, of which [as we have seen] there are many."

It was not, however, only a matter of worship. Mankind found other reasons for circumambulating around various precincts, not to mention the original intent behind the construction of such precincts, as aptly indicated in the following extract from one of Eliade's works:

"[L]ong before they were military erections, [city walls] were a magic defence, for they marked out from the midst of a 'chaotic' space, peopled with demons and phantoms...an enclosure, a place that was organized, made cosmic, in other words, provided with a 'centre'. That is why in times of crisis (like a siege or an epidemic), the whole population would gather to go round the city walls in procession and thus reinforce their magico-religious quality of limits and ramparts. This procession round the city, with all its apparatus of relics and candles, was sometimes purely magico-symbolic in form: the patron saint of the town was offered a coiled waxen taper as long as the perimeter of the wall."

And not only in the western world, but, as Eliade goes on, also in the east: "In northern India, for instance, in time of epidemic, a circle is described around the village to stop the demons of the illness from entering its enclosure."

Yet even then, as already indicated, and as duly noted by Jill Purce, in its innovation, the ritual circumambulation of cities was meant to imitate, or re-enact, "the original cosmic creation; for when a space is set aside or delineated it is ordered, carved out from the surrounding chaos, and so sanctified."

¹ J. O'Neill, Night of the Gods (London, 1893), p. 698.

² N. Baldwin, loc. cit.

³ G. Balbin, Cyclical Catastrophe (Boulder, CO, 2005), p. 161.

⁴ Ihid

⁵ M. Eliade, Patterns in Comparative Religion (London, 1996), p. 371.

⁶ Ibid.

¹ J. Purce, The Mystic Spiral (London, 1974), p. 29.

When it comes to dancing, sacred or otherwise, however, it must not be understood that all of them remained inexorably associated with Creation. Having learned to dance, man continued to utilize this means to express himself, as also to impress his magic on an unwilling nature. As time went by, men learned to dance before warring on each other, as they also danced when they needed rain. They danced to warm up the winter Sun and to lure the game to the hunting party. Women became participants in fertility dances, harvest dances, birth, and mourning rituals. There evolved shamanistic and medicine dances, puberty dances, and even orgiastic ones. Last of all there developed the dance of death—the dance of utter destruction—of which Shiva's terrible tandava became a prime example. Only later, much later, did man learn to dance for his own enjoyment and the enjoyment of those who watched him and his partners dance.

Chapter 13

Orbital Development

THE SEVEN DAYS

s we have already seen, and as every Jew and Christian knows, it is stated in the Book of Genesis, and repeated elsewhere in Hebrew sources, that Elohim accomplished the Creation in seven consecutive days. The question that immediately comes to mind in our development of this event concerns these very days. Since Earth was axially suspended beneath its primeval sun, rather than orbiting around it, the day had not yet come into existence. In fact, as we have often stressed, there was no way during that particular event that man could have been able to calculate the passage of time. How, then, could it have been ascertained that the event in question took seven days to unfold? Even if one had to repudiate our own particular development and stick meticulously to the Biblical rendition, the Sun, to say nothing of the Moon and stars, is said not to have been placed in the sky until the fourth day. How, then, could it be recognized that three days had already passed?

There have been those, however, who have followed Moshe ben Maimon, whom we have mentioned earlier, in explaining the seven days of Creation as a metaphor for seven lengths of time, that is eras, of unknown duration.³ So, for instance, the Jesuit priest and scientist Guy Consolmagno, who has been referring to these seven days as "poetry, beautiful poetry" but still "with a lesson" underneath it all.⁴ But had that been the case, why particularly seven of these eras?

That it was the number seven, rather than days or eras, that was of importance can be gathered from a Gnostic text from Hellenized Egypt in which God is whimsically said to have achieved Creation by laughing seven times.⁵ As we have seen and will continue to see, the number seven was consistently associated with the proto-Saturnian deity. In Hebrew, the very name of the planet Saturn, that is Shabtai, is derived from *shebalshibbah* and *shibathayim*, Hebrew for "seven" and "sevenfold." So, likewise, in India with Shiva, another name of whom is Achala that, as a noun, translates as "seven." And this was just as prevalent in the New World, as David Kelly noted when he presented the Mesoamerican deity known as the "old black god of the number seven" as "the god of the planet Saturn." As Ken Moss has ably

¹ Genesis 1-2: 2.

² *Ibid.*, 1: 14-19

³ Maimonides, Guide fror the Perplexed, II:25.

⁴ M. Mason, "Holy Alliance," *Discover* (September 2008), p. 43.

⁵ W. A. Heidel, *The Day of Yahweh* (N. Y., 1929), p. 532.

⁶ J. Strong, Hebrew and Chaldee Dictionary (Madison, N. J., 1890), p. 112.

¹ V. S. Apte, The Practical Sanskrit-English Dictionary (Delhi, 1965), p. 20.

² D. H. Kelly, "Planetary Data on Caracol Stela 3," in A. Aveni (ed.), Archaeoastronomy in Pre-Columbian America (Texas, 1975), p. 259.

demonstrated, one of these Mesoamerican proto-Saturnian deities was the Mayan Itzam-Yeh.¹ And in his avian incarnation, the same Itzam-Yeh was known as Waqub-Kaqix, in other words, Seven-Macaw.² Even the number of days as having been seven was, as we have also seen, commemorated in various ancient rituals of the same length.³ Much later in time, this misconception—for that is what it really amounts to—gave rise to the belief that the end of the world would resolve itself in just as many days.⁴

Those who have read this far will correctly connect this number to the seven coils of the spiraling matter that was emitted by proto-Saturn following its blinding flare-up. And that this spiral was seen by some as a celestial serpent need not be repeated. William Ward came close to the mark when he described the Biblical serpent known as Leviathan as "a symbol of the primeval chaos God had to conquer to bring creation under control." Or as Isaac Asimov expressed it, "the supreme god" accomplished Creation "out of the remnants of that monster," to which he added that this can be taken as "symbolizing the victory of order over disorder, of cosmos over chaos." Yet, even so, how did the serpent's sevenfold spiral came to be understood as seven days? Why days?

THE SEVEN SEAS

Let us backtrack a little and take a brief look at some of the underpinnings we have already discussed plus a few additional ones that continue to stress the same motifs. By the time Christianity began to take hold in the ancient world, according to the British theologian Dennis Nineham, the act of Creation was believed to have "involved God in a desperate, but finally victorious, contest with the forces of chaos and evil, which were identified with, or at any rate, located in the waters of the sea." As propounded further by Darrell Johnson, in the much earlier Canaanite version of Creation, what is normally misunderstood as the world came into being as a result of a war between Baal and Leviathan, whom he presented as "the great sea monster, the god of chaos."

The association of the number seven with the deep sea goes all the way to an obscurte statement of the Assyro-Babylonians who claimed these seven to have been a group of malevolent entities concerning whom it was said that: "In the source of the apsû seven are they." Although described as neither rings nor spirals, we keep in mind that, besides being traceable to Saturn, the apsû was the name of the Assyro-Babylonian waters of chaos. More that that, Saturn can actually be called the very source of the apsû since it was this heavenly

¹ K. Moss, "Maya Cosmos: A Saturnian Interpretation," AEON, VI:1 (February 2001), pp. 84 ff.

² Ibid.

³ Check, here, also the Index to L. Ginzberg, *The legends of the Jews*, Vol. VII (Philadelphia, 1967), p. 428 for references to various events that are also said to have lasted seven days, weeks, months, and/or years.

⁴ Apocalypse of Thomas, 1-10.

⁵ W. B. Ward, Out of the Whirlwind (Richmond, Virginia, 1958), p. 103.

⁶ I. Asimov, Asimov's Guide to the Bible, Volume One: The Old Testament (N.Y., 1971), p. 486.

 $^{^{7}}$ $\it Ibid.$

⁸ D. E. Nineham, The Gospel of St. Mark (N. Y., 1963), p. 146.

⁹ D. W. Johnson, Discipleship on the Edge (Vancouver, British Columbia, 2004), p. 137.

¹ WE. F. Albright, "The Mouth of the Rivers," The american Journal of Semitic Languages and Literatures (July 1919), p. 166.

entity, as Ea, that chained the apsû to its bed, thus confining the waters to one place.

Ningishzida (also Ningizzida) was a Babylonian deity usually depicted with two serpents sprouting from his shoulders.² These serpents are identical to the two streams shown spurting from the shoulders of Ea.³ Ningishzida can therefore be seen as yet one more alias of the Saturnian deity. Of interest here is that Ningishzida is also shown together with seven circles.⁴

Rather than seven evil spirits, the Egyptians spoke of the Seven Wise Ones. Once again, it is interesting to note that these Seven Wise Ones are said to have come from the water. Just as the Babylonian seven were "born" in the $aps\hat{u}$, so were the Egyptian seven said to have been born in Nu, or Num, 5 the celestial water we have already discussed on an earlier page.

As we have, however, indicated in a previous work, ⁶ Leviathan was not only described as a sea monster, ⁷ he was even identified as the sea itself. ⁸ That this was the *celestial* sea we have been harping on is confirmed by Leviathan's assimilation to "the vault of heaven." ⁹ So, similarly, with Shesha, the serpentine entity of the Hindus, also known as Ananta, who was seen as representing the waters of the cosmic ocean. ¹⁰ As we had pointed out in the previous work we have already mentioned, ¹¹ the serpent's association with the cosmic sea was due to overlapping of celestial portents. As our primeval sun's uncoiling spiral of debris continued to expand, it was virtually seen to merge with the shrinking celestial sea, the contracting circumstellar disk, that had been hugging proto-Saturn's equatorial region. Serpent and sea had visually become one. ¹²

I hate to keep repeating myself, but, as we have already seen in this very volume, one of the Sanskrit names for the planet Saturn is Saptan-Amshupungavah that translates as "seven seas of teeming light beams" that interestingly ties the seven to both light and water. As we have also noted, when it comes to Indic tradition, these seven seas, or oceans, have always been taken for granted. And, to be sure, as just about everyone knows, the seven seas became a fixation that continues to this very day in quite a few modern expressions such as "to sail the seven seas" and even "the pirates of the seven seas," when no one can ever name the seven seas in question.

What needs to be stressed at this point will definitely alienate more of my readers, but, if the truth has to be told, it cannot be helped. What actually transpired is that these seven seas

¹ Enuma Elish I: 69-71.

² A. L. Frothingham, "Babylonian Origin of Hermes the Snake-God and of the Caduceus," *American Journal of archaeology*, Vol. XX (1916), p. 184.

³ W. F. Albright, op. c it., p. 173.

⁴ A. L. Frothingham, op. cit., p. 186.

⁵ E. A. W. Budge, *The Gods of the Egyptians*, Vol. I (N. Y., 1904/1969), p. 516.

⁶ See more below.

⁷ W. B. Ward, loc. cit.

⁸ L. Ginzberg, op.cit., Vol. V (Philadelphia, 1968), p. 43.

⁹ Ibid.

¹⁰ H. Zimmer, Myths and Symbols in Indian Art and Civilization (Princeton, 1974), pp. 76, 202.

¹¹ D. Cardona, Metamorphic Star (Oregon, 2011), p. 313.

¹² For more on the subject, see *ibid*., pp. 288-292, 312-314.

¹³ V. S. Apte, op. cit., pp. 2, 621, 823, 959.

¹ Linga Purana, 53: 27-28.

were just as prominent among some of the early Semites, some of whom had actually described Creation as having emerged out of these celestial waters. To them and their immediate descendants, Creation took place in seven seas. As to be expected, however, those who came much later could not make much sense out of such a belief. In time, in the early writing of the Hebrews, the seven seas were misunderstood as a misrepresentation of seven days, not only because that made more sense, but because the difference between the Hebrew words for "sea" and "day" was a non-existent vowel. The word for "sea" in this language is yam; the word for day is yom. Early Hebrew, however, was written without vowels, so that both words were originally written as ym. The meaning of whether ym meant "sea" or "day" was ascertained through context. But context, in such a phrase as "Creation took place in seven ym," justifiably favored "days" rather than "seas." It was not until sometime between the 5th and 10th centuries of the present era that the Masoretic scribes inserted diacritical marks to indicate vowel sounds into the Hebrew language. Understandably enough, by then logic dictated that the seven ym of Creation should be read as yom, and the seven days of Creation became the truth of the matter.

Whatever it was that Elohim was said to have created on each day—the emitted light, the firmament, the Sun, the Moon, the stars, animals, trees, and so forth—was added later in order to account why it took seven days for God to have accomplished his Creation.

THE DAY OF REST

Truth be told, Genesis vouches for only six days of Creation since Elohim did nothing but rest on the seventh.¹ It is for that very reason that the seventh day of the week became named after the Saturnian deity. As we have already seen, in Hebrew this day is known as the Sabbath, cognate with the Assyro-Babylonian šabattu.² To be sure, the Jews resented, as many of them continue to resent, the association of the Sabbath with Saturn's day,³ but that cannot be helped.

This particular day, however, was held sacred to Saturn not only among the Jews but also among various ancient nations and, to this day, it continues to bear the planetary deity's name in these nations' various languages. To English-speaking people this day is Saturday, which name is derived from a contraction of the Saxon Saterne's Daeg, through the Latin Saturni Dies, both of which mean "Saturn's Day." In Italian, Saturday is rendered Sabato, derived from Hebrew through the Greek Sabbaton. In Arabic it is yôm is-sabt. In Maltese, it is Sibt, derived from the same Semitic root.

We continue to come across the Saturnian association with the seventh day of the week even outside non-Semitic nations and their languages. Thus, in India, this very day is called Shanivar or Shanivara. And since Shani is one of the Sanskrit names for the planet Saturn, the name also translates as "Saturn's Day." Even in the Far East, in Indo-China and Cambodia, what to us is Saturday is named in honor of Prah Sau, which is the same planet Saturn.¹

¹ Genesis II: 2-3.

² S. Dalley, Myths From Mesopotamia (N. Y., 1991), p. 275.

³ W. A. Heidel, op. cit., p. 437.

¹ C. H. Marchal, "The Mythology of Indo-China and Java," Asiatic Mythology (N. Y., 1972), p. 198.

Together with the Jews, some early Christians continued to observe the day of rest on Saturday, while others reverted to Sunday, and this continues to the present day. The difference had to do with dissimilar interpretations of what the Lord's Day, as it eventually became known, actually signified.¹

Leaving that religious dispute alone, however, we still find ourselves bound to ask why God found it necessary to rest on the seventh day of Creation. Even if we were to adhere to ben Maimon's interpretation that the seven days in question represented seven periods of undetermined duration, one is still bound to ask what it was that would have constituted "rest" in the last of these periods.

Looking at the situation from our point of view, what does Elohim's resting really amount to? Before we discard this problematic act as a religious absurdity, let us look a little deeper into the question. The Hebrew word that is used in *Genesis* for "rested" is *shabath*, the meaning of which is given by James Strong as "to *repose*, i.e. *desist* from exertion." A related word is *shebeth* which means "to cease" or "sit still." The implication in context thus seems to be to "stop from moving." This leads us to ask: Did Elohim rest from his services, or did he *come* to rest?

As we have already indicated, due to Earth's minor wobbling following proto-Saturn's light-emitting disruption, the proto-Saturnian orb was seen to meander around a central point. Adding to what we have already divulged on this topic, we learn that Shiva, as described in the *Puranas*, wandered about while surrounded by a bevy of ethereal entities that we recognize as the swirls of proto-Saturn's emitted spiraling debris. Once Earth stopped wobbling, proto-Saturn was seen to come to rest. In other words, the proto-Saturnian sun regained its previous immobility in Earth's north celestial pole. More than that, it did so upon, —that is, in the centre of—the innermost ringlet of the sevenfold spiral. To some of those who saw it happen, Elohim had come to rest on the seventh sea.

THE DUAT

Among his various praises the Egyptian Ra was lauded as the "creative force" that rested "in the Tuat." What was this Tuat that is also rendered Duat, Dwat, and/or simply Dat?

Much like the religions of other nations, both old and new, the one followed by the ancient Egyptians dictated an afterworld where the souls of the living went to reside after death. But gods, the Egyptians believed, like mortal men, also grew old and died. For that reason the gods also had to have an afterworld and this afterworld was called the Duat.²

According to the Theban doctrine of Egypt's New Kingdom, as set forth in the Shat am Tuat and Shat en Shau, the Duat consisted of an immense valley enclosed by towering

¹ W. A. Heidel, op. cit., p. 438.

² J. Strong, loc. cit.

³ Ibid

⁴ M. Oldfield Howie, The Encircled Serpent (N. Y., 1955), p. 65.

⁵ E. A. W. Budge, op. cit., p. 339.

¹ *Ibid.*, p. 170.

² Ibid.

mountains. Through this valley ran a river on the banks of which lived a multitude of monstrous beasts and devils. These were evil spirits that were supposed to be hostile to the souls of the dead.

This concept, however, was the result of an accumulation of older beliefs from various Egyptian nomes.

"The ideas about this region, which we find reproduced in papyri of the New Empire, belong to different periods, and we can see that the Theban writers who described it and drew pictures of the beings which lived in it, collected a mass of legends and myths from every great religious centre of Egypt, wishing to make them all form part of their doctrine concerning the great god of Thebes, Amen-Ra."

Egyptologists have unfortunately fallen into the habit of referring to the Duat as the underworld,⁴ despite the fact that Wallis Budge had long ago informed his readers that "it must be distinctly understood that the Egyptian word does not imply that it was situated under our world and that this rendering is only adopted because the exact significance of the name Tuat is unknown." (See here, for instance, the confusing accounts offered by Samuel Mercer and Rundle Clark.) As Budge goes on:

"The word is a very old one, and expresses a conception which was originated by the primitive Egyptians, and was probably known to their later descendants, who used the word without troubling to define its exact meaning...In the XIXth Dynasty we know that the Tuat was believed to be situated not below our earth, but away beyond the earth, probably in the sky..."

That the Duat could not have been a valley of any kind is borne out by the fact that, for one thing, it was presented as an "equivalent of Nun, the first waters from which the creator had evolved" that we have come to recognize as proto-Saturn's circumstellar disk. For another, the same region was additionally believed to have existed "within the body of the cosmic goddess Nut," which goddess is well known to have personified the sky. Regrettably, despite Budge's clarification on this issue, as Giorgio de Santillana and Hertha von Dechend noted, "modern translators believe so firmly in their own invention, according to which the underworld has to be looked for in the interior of our globe," that they tend to ignore every

¹ *Ibid.*, p. 171.

² *Ibid.*, p. 173.

³ *Ibid.*, p. 172.

⁴ *Ibid.*, p. 170.

⁵ *Ibid.*, pp. 170-171.

⁶ S. A. B. Mercer, *The Pyramid Texts*, Vol. II (N. Y., 1952), pp. 169, 173, 404, 448, 451 and Vol. IV, pp. 33-36; R. T. Rundle Clark, *Myth and Symbol in Ancient Egypt* (London, 1978), p. 165.

⁷ E. A. W. Budge, loc. cit.

¹ N. Grimal, A History of Ancient Egypt (Oxford, 1992), p. 127.

² J. Naydler, Shamanic Wisdom in the Pyramid Texts: The Mystical Tradition of Ancient Egypt (Rochester, Vermont, 2005), p. 84.

trait that locates the so-called underworld in the sky.1

Although Milton Zysman accepted the original location of the mytho-historical underworld as having been in the sky, he could best envision it as having been an aspect of Earth's northern auroral manifestations.² A marked disparity against this concept, however, is the fact that the Duat was said to have been divided into regions each of which, among other things, was called *qerert*, an Egyptian word that means "circle." Not only was the Duat distinctly said to have also been the realm of Osiris, but its circular enclosure was additionally said to have been formed *from*, or *by*, the god's own bent body during Creation. As the text on the sarcophagus of Seti I explicitly declares, "it is Osiris himself who forms the encircling border of the Tuat." And, to be sure, the depiction on Seti's sarcophagus shows Osiris "bent round like a hoop" to form the enclosure of the Duat.

The most convincing evidence concerning the identity of the Duat as the god's encirclement of light, however, comes from the hieroglyphic determination of the name Duat itself which is simply depicted as a star surrounded by a circle. And, in fact, as Raymond Faulkner informs us, when the *Pyramid Texts* state that "Sothis is swallowed up by the Netherworld," that is the Duat, the term translated as "swallowed up" actually means "encircled."

Each division of the Duat was also called *arret* which means "hall." And, by no means surprising at this point in our reconstruction, according to the *Papyrus of Nu*, as contained in the Per(t) em Hru, we learn that the arrets, or halls, of the Duat were seven in number. ¹⁰

The sevenfold boundaries of the so-called netherworld was not restricted to ancient Egyptian doctrine. We encounter the same belief in Mesopotamia where, instead of seven halls, the region in question, known as the Kurnugi, was said to be safeguarded by seven gates, which gates have been recognized as boundaries dividing the mytho-historical cosmos. And, to be sure, the Babylonians understood the netherworld as a prison, and thus

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¹ G. de Santillana & H. von Dechend, Hamlet's Mill: An Essay on Myth and the Frame of Time (Boston, 1969), p. 73.

² M. Zysman, "Let There Be Lights," in M. Zysman & C. Whelton (eds.), Catastrophism 2000 (Toronto, 1990), pp. 156-157.

³ E. A. W. Budge, op. cit., p. 176.

⁴ *Ibid*., p. 171.

⁵ Ibid.

⁶ *Ibid.*, p. 203

⁷ Idem, An Egyptian Hieroglyphic Dictionary, Vol. I (N. Y., 1920/1978), p. cxxv; S. A. B. Mercer, op. cit., Vol. II, p. 156.

⁸ R. O. Faulkner, The Ancient Egyptian Pyramid Texts (Oxford, 1969), p. 44.

⁹ E. A. W. Budge, *The Gods of the Egyptians*, Vol. I (N. Y., 1904/1969), p. 176.

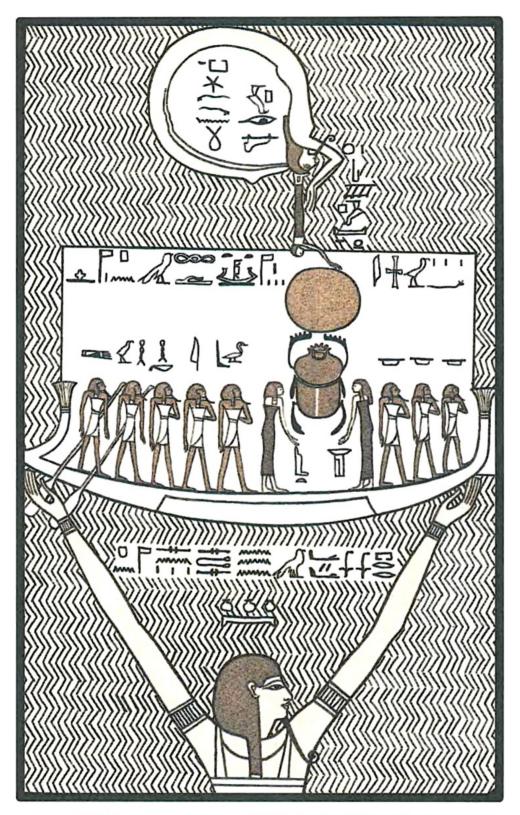
¹⁰ Ibid.

¹ S. Dalley, op. cit., pp. 155, 158.

² Ibid., pp. 158, 165; D. Ragavan, "Entering Other Worlds: Gates, Rituals, and Cosmic Journeys in Sumerian Sources," in D. Ragavan (as editor), *Heaven on Earth: Temples, Ritual, and Cosmic Symbolism in the Ancient World* (Chicago, Illinois, 2013), p. 204.

³ D. Ragavan, op. cit., pp. 213-214

⁴ C. Ambos, "Temporary Ritual Structures and their Cosmological Symbolism in Ancient Mesopotamia," in D. Ragavan, op. cit., p. 248.



Detail from the sarcophagus of Seti I showing Osiris, at the top, "bent round like a hoop" to form the enclosure of the Duat.

a securely enclosed area. To the Hindus, the netherworld, or underworld, was said to consist of seven levels.¹

According to our reconstruction of the events associated with Creation, these seven halls, gates, and/or levels were the same as the seven seas and/or days that resulted from our ancient forebears' attempts at interpreting proto-Saturn's emitted sevenfold spiral of debris. And yet, very much in accordance with the Duat's hieroglyphic determination, the sevenfold spiral seems to have finally resolved itself into an encircling enclosure—in other words, into seven separate rings. Can this be validated?

¹ J. M. Lundquist, The Temple: Meeting Place of Heaven and Earth (London, 1993), p. 60.

Chapter 14

Heavenly Multiplicity

THE FIRMAMENT

In the sixth verse of the very first chapter of the Book of Genesis it is written that Elohim said "let there be a firmament in the midst of the waters." The word "firmament," which in the original Hebrew is raqia—variant raqiya or rakhia—has mainly been understood as the inverted canopy, or arch, of the sky or heaven. We encounter the same concept in the Babylonian Enuma Elish where it is stated that "a great structure," called Esharra, that has been interpreted as "a canopy," was "established" during the organization of what had already been created. In both the Babylonian and Hebrew narratives, this so-called canopy is presently understood as a reference to the sky. Thus, the Genesis event in question has even been made to read:

"And God said, 'Let there be a dome in the midst of the waters, and let it separate the waters from the waters.' So God made the dome and separated the waters that were under the dome from the waters that were above the dome. And it was so. God called the dome sky."

Actually, according to English translations of the Book of Genesis, Elohim—or God, as he is there named—called the Firmament "heaven" rather than "sky," which is not necessarily the same thing. Even that, however, is incorrect since the Hebrew word in this instance is shamayim which is the plural of an unused singular. In other words, the created raqia was a multiple array.

Another false interpretation of the Hebrew *raqia* was as some sort of water canopy hovering above Earth that was proposed by Isaac Newton Vail in 1886.⁷ This theory became so enamored by Biblical fundamentalists that, as James Strickling noted, it actually became difficult to come across an edition of the leading creationist journal without encountering a reference to it.⁸

¹ Genesis I:6.

² J. Strong, Hebrew and Chaldee Dictionary (Madison, N. J., 1890), p. 110.

³ A. Heidel, *The Babylonian Genesis* (Chicago, Illinois, 1942), p. 32.

⁴ M. D. Meinhardt, "Seven Luminous Days," Bible Review (August 2002), p. 19.

⁵ Gensis I: 8.

⁶ J. Strong, op. cit., p. 118.

⁷ I. N. Vail, *The Earth's Annular System or the waters Above the Firmament* (Pasadena, California, 1886/1912), *in toto*; see also D. Cardona, "The Reflective Canopy Model and the Mytho-Historical Record," *AEON* IV:4 (April 1996), pp. 13-37.

⁸ J. E. strickling, Jr., Origins: Today's Science, Tomorrow's Myth (N. Y., 1986), pp. 28-29.

What could this firmament have been?

As we have more than once indicated, the difficulty in correctly rendering what the ancients meant to convey involves much of the Book of *Genesis*. Translations of these primitive texts reflect nothing more than a choice of interpretation in an attempt to make sense of what had been reported according to what eventually became accepted as being both possible and probable. Thus, in a work edited by Alma Guinness, one finds it stated that:

"This little-used English word [that is, 'firmament'] is a translation of the Hebrew raqia, but it captures little of the color of the original. The Hebrew raqia derives from the verb raqa, meaning to beat out or hammer out, and it conveys the valid image of a metal surface hammered out like a copper or golden bowl."

That is the manner in which various authorities have understood this particular troublesome section in *Genesis*. Truth be told, however, while it may mythologically be assumed that it was hammered out, which means that it was brought into existence violently, the word *ragia* properly signifies "an expanse."²

I shall even go one step further. Despite his castigation by some of the followers of Immanuel Velikovsky's controversial works, Charles McDowell just about hit the nail right on the head when he wrote that:

"I regard the *raqia* as the linguistic equivalent of the Indo-European torque (as it appears in English) and, therefore, as a collar, ring or disk. In the physical sense, then, I believe the firmament consisted of orbiting rings similar to those of Saturn."

Without wishing to depreciate McDowell's interpretation, I have to admit that the reason I judge his elucidation as *just about*, rather than *outrightly*, correct is that the orbiting rings he had in mind were not merely *similar* to those of Saturn, but actually *those* of the proto-Saturnian sun.

THE SEVEN HEAVENS

"In Talmudic tradition," David Rohl tells us, "there are seven heavens (Heb. rakiim) which the deceased must pass through to reach the Throne of Glory (hence the phrase 'seventh heaven', meaning ecstasy)." That is exactly what we have already encountered in the Egyptian netherworld known as the Duat. In both cases do we find the underworld in question located in the sky and composed of seven heavenly compartments. In our reconstruction, these seven compartments, normally understood as seven heavens, consisted of proto-Saturn's sevenfold spiral that eventually resolved itself into seven separate rings. Thus, according to Jewish myth, having been created, these heavens "became fruitful and

¹ A. E. Guinness (Ed.), Mysteries of the Bible (N.Y., 1988), p. 18.

² J. Strong, op. cit., p. 110.

³ C. McDowell, "Velikovsky & Christian Catastrophists," Journal of the American Scientific Affiliation (December 1973), p. 142.

⁴ D. M. Rohl, Legend: The Genesis of Civilization (London, 1998), p. 59.

multiplied." God is not only said to have "made firm the heavenly circle," but, very much as in ancient Egyptian belief, to have divided it into seven hekalot, or heavenly halls, or, as elsewhere indicated, to have "created seven circles from inside." More than that, these seven hekalot were themselves explicitly described as having been nothing more than the seven heavens said to have been created by God. These heavens were then said to have consisted of fire and water, which fire was stressed not to have been of an earthly or physical nature. It is, incidentally, in the seventh of these heavens, or firmament, that Yahweh was said to reside. Nor is this concept unique to Jewish lore. The planetary gods of Babylon also ruled "over seven superposed starry circles."

The prominence of the number seven in the mytho-historical record could not have been missed by mythologists, but the most-often offered interpretation of what lies behind it falls completely off the mark, as notice the following by Peter Lancaster Brown:

"[This number] was significant to the ancients because the five planets plus the Sun and Moon provided the most significant cosmic number. But there are also seven bright stars in Ursa Major, Orion, and the Pleiades cluster."¹⁰

So, likewise, with Peter James:

"The idea of 'seven heavens' and 'seven hells' is commonplace in Near Eastern tradition, from Hebrew to Babylonian and must surely reflect the idea of a 'heaven' for each of the seven planets, balanced by their opposites beneath the earth. The idea of the seven gateways to the Nether World is common in the earliest Babylonian literary texts, while the idea of 'seven heavens' is known from Sumerian documents." ¹¹

The concept of the seven heavens, however, could not have developed from the seven planets since only five of these bodies could actually have been seen with the unaided eye in ancient, as well as modern, times. Uranus and Neptune were *telescopically* discovered much later in time. In that respect, Brown was on better footing when he added Sun and Moon to the five planets that *could* have been observed by the Sumerians, Babylonians, and other ancient peoples. So, also, with Anthony Aveni, ¹² although just as wrong. Worse still, James failed to clarify what he meant by the "opposites" of these planets "beneath the earth." But, as

¹ L. Ginzberg, The Legends of the Jews, Vol. V (Philadelphia, 1968), p. 17.

² The Book of the Secrets of Enoch, in W. Barnstone (ed.), The Other Bible (N. Y., 1984), p. 5.

³ L. Ginzberg, op. c it., p. 11.

⁴ The Book of the secrets of Enoch (see above), loc, cit, (emphasis added).

⁵ Ibid.

⁶ *Ibid.*, p. 7.

⁷ Ibid.

⁸ M. A. Morgan, Sepher Ha-Razim: The Book of Mysteries (Chico, California, 1983), p. 83.

⁹ U. Holmberg, Der Baum des Lebens (Heisinki, 1923), p. 123.

¹⁰ P. L. Brown, Megaliths and Masterminds (N. Y., 1979), p. 207.

¹¹ P. J. James, "The Saturn Problem," Chronology & Catastrophism Review (2000:1), p. 102, concerning which he referred the reader to W. Horowitz, Mesopotamian Cosmic Geography (Winona Lake, Indiana, 1998).

¹² A. Aveni, Conversing With the Planets: How Science and Myth Invented the Cosmos (Boulder, Colorado, 2002), p. 58.

I usually say in such matters, let that be. And yet, even from a purely mytho-historical point of view, has the concept of the seven heavens been mainly misunderstood as indicated in the following by Deena Ragavan:

"The symbolism of the number seven in Near Eastern literature is widely attested...Several Sumerian examples...utilize the number seven or sevenfold repetition to mark divisions of the cosmos, particularly seven heavens...There is little evidence outside of the magical literature for the existence of seven heavens...although lexical texts do indicate the equation of the number seven with the Akkadian term kiššatu "all totality," which may mean that it is a way to convey a large, complete, or innumerable unit...This would explain why it is only in texts with strong ritual associations that parts of the cosmos are divided into seven."

Let us, however, get a few things straight. First of all, the number seven, as will be seen, is not only "widely attested" in Near Eastern literature, but in countries that could have had no contact with the Near East in antiquity or even later in time. Secondly, but just as importantly, kiššatu became understood as "a large, complete, or innumerable unit" by interpreters who had absolutely no way of knowing how the mytho-historical prominence of the number seven derived such widespread dissemination.

Meanwhile, just as the Egyptians did with their Duat, so did Jewish tradition fill the seven heavens with all sorts of mystical objects and other monstrosities.² In fact, the *Book of the Secrets of Enoch* tells of so many tortures contained in the seven heavens reserved for the damned that, in God's own abode, we actually catch a reflection of hell.³ And, in order to clinch the matter, we find that Jewish lore describes hell, very much like heaven, as composed of seven divisions.⁴ Moreover, hell was said to be situated, not beneath Earth, as in popular Christian belief, but high above the sky.⁵

As Louis Ginzberg tells us: "In rabbinic sources the word ordinarily used for 'hell' is Gehinom," which was also the name given to the valley near Jerusalem where the god Moloch was once worshipped. It therefore becomes evident that the name of this valley derived from the Saturnian deity's celestial abode, evidence of which is also intimated through the fact that Moloch's temple, or Topheth, consisted of seven compartments.

Gehinom is also rendered Gehenna.⁸ In the Semitic-derived language of the Maltese islanders, Genna, the same as Gehenna, does not mean "hell." Ironically enough, it means "paradise." But then, in Jewish myth, paradise is also said to be composed of a sevenfold

¹ D. Ragavan, "Entering Other Worlds: Gates, Rituals, and Cosmic Journeys in Sumerian Sources," in D. Ragavan (ed.), Heaven on Earth: Temples, Ritual, and Cosmic Symbolism in the Ancient World (Chicago, Illinois, 2013), p. 206.

² L. Ginzberg, op. cit., Vol. I, pp. 9-10.

³ Secrets of Enoch, VII: 1-3, X: 1-3, XVIII: 1-7.

⁴ L. Ginzberg, op. cit., Vol. I, p. 15 & Vol. V, pp. 11, 418.

⁵ *Ibid.*, Vol. V, p. 19.

⁶ Ibid.

⁷ *Ibid.*, p. 20.

⁸ *Ibid.*, p. 19.

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Wallace Budge cautions his readers not to think of the Duat as a hell.² But since, in the minds of men, it eventually turned into a place of punishment for the wicked after death,³ the comparison cannot be helped. As the abode of the god in the sky, however, it is more apt to think of it as heaven.

ELEMENTAL INDOCTRINATION

At the beginning of Christian idiosyncrasy—for I cannot call it anything else—Gnosticism amalgamated creeds from different, but still related, doctrines into a single, even if a somewhat ambiguous, ideology. As an example of the manner in which the particular concept with which we are presently concerned passed on from a retelling of events in ancient times into an attempted incontrovertible belief is evidenced by a Gnostic text the title of which, had there even by any, has not survived. Modernly designated as On the Origin of the World, it has been tentatively dated to somewhere between the end of the third and the beginning of the fourth century A.D.⁴ The plurality of heavens, even to the enumeration of seven of them, is there explicitly mentioned,⁵ but, perhaps more importantly, so is the moving of the Creator's spirit "to and fro over the waters" that, to us, reflects proto-Saturn's temporary wandering together with its diminishing circumstellar disk. As it continues to describe these half-forgotten primeval events, the Gnostic text in question describes the Creator as having formed "a dwelling place for himself" and that, unsurprisingly, he called it Heaven.⁷

That the seven heavens were known to civilizations outside the Near East is evidenced by their inclusion in the lore of tribal societies that could not have had any contact with the Near East. Among such tribes are the Yakuts of Siberia in the Creation myth of whom the "seven storeys of heaven" are given prominent mention. The Khanty, also known as Ostyaks, of the same geographical area, likewise envision heaven as composed of "seven layers." Shamans among different tribes of Siberia incorporate the knowledge of the seven heavens in their ritualistic climb to reach the god Bai Ülgän who resides at the Pole Star. So, likewise, among the Karen people of what was once Burma, now re-named Mayanmar, who also believe in ascending up-on-high through the realm of the seven heavens. And way across the Pacific in Tahiti, the natives still tell how the seven heavens stretch, or did once stretch, above Earth, where Ta'aroa, the creator, had once been housed. There are various other

¹ *Ibid.*, Vol. I, pp. 11, 21 & Vol. IV, p. 118.

² E. A. W. Budge, The Gods of the Egyptians, Vol. I (N. Y., 1904/1969), p. 170.

³ Thid

⁴ W. Barnstone, The Other Bible (N.Y., 1984), p. 62.

⁵ *Ibid.*, p. 64.

⁶ Ibid.

⁷ Ibid.

⁸ R. Cook, The Tree of Life: Symbol of the Centre (London, 1974), p. 12.

⁹ U. Holmberg, op. cit., p. 30.

¹⁰ E. C. Krupp, Beyond the Blue Horizon (N. Y., 1991), p. 286.

¹¹ F. Mason, "Religion, Mythology, and Astronomy Among the Karens," *Journal of the Asiatic Society of Bengal*, Vol. 34, Part 2 (1865), p. 233.

¹² A. Fornander, An Account of the Polynesian Race (London, 1878), p. 222.

examples that we could mention, but, in order not to tax the reader's patience, especially with so much more yet to come, it's best that we move on.

CONCENTRIC ENCLOSURES

Halos were, as they still are, also known as glories. In the Book of *Enoch*, God's glory is alluded to as a "flaming fire" that was "round about him." Elsewhere we read of "the glory of the Lord that was like a devouring fire." What is more important is that this glory, or halo, was said to have consisted of "seven sheaths of fire, laid one over another."

Halos are nothing more than circles of light around a person or object. Thus, when asked what it was that composed the seven *hekalot*, or "heavenly halls," that we mentioned above, the Hebrew answer was that they consisted of "seven zones," each one of which was a circle in its "sevenfold" orbit of what was "surnamed" the "heavens."

One of the Mesopotamian deities that has been equated with the Saturnian one is the one known as Humbaba whose name is also rendered as Huwawa.³ It is therefore not surprising that one of this deity's attributes was a sevenfold halo,⁴ also known as the sevenfold terror,⁵ that was said to have surrounded him, even though, as Ev Cochrane noted, "Babylonian scholars are noticeably silent about what these 7-haloes might have reference to."

Among the praises of the Egyptian Ra we find him being lauded in association with a plurality of rings. "Praise be the thee, O Ra...lord of the hidden circles" it has been recorded, and "Praise be to thee, O Ra...of the Circles of Ament." In association with that we also learn that his bas, usually translated as "souls," were "seven in number."

In India, one of the Sanskrit names of the planet Saturn is Suryaputrah, which name translates as "son-of-the-sun" that, in the *Linga Purana*, is rendered as the seven-rayed Saturn. Additionally, the central region of the abode of Brahma, known as the Brahmanda, is believed to be divided into seven ring-shaped regions. Known as *dvipas*, these regions have been interpreted as islands and/or oceans that alternate in such a fashion to form what has

¹ L. Ginzberg, op. cit., Vol. III, p. 143. (NOTE: Although Ginzberg makes use of this information in his chapter on Moses, the belief is even there referred to a much earlier time.)

² Eusebius, Evangelicae Praeparationis, IX: xi: 413 d.

³ See here, D. Cardona, "Humbaba," KRONOS IX:2 (Winter 1984), pp. 6-9; idem, Metamorphic Star (Oregon, 2011), pp. 306-309.

⁴ E. Cochrane, "Heracles and the Planet Mars," AEON I:4 (July 1988), p. 96.

⁵ S. H. Langdon, Semitic Mythology, Vol. V of The Mythology of All Races (N. Y., 1964), p. 247.

⁶ E. Cochrane, loc. cit.

⁷ E. A. W. Budge, op. cit., p. 339.

⁸ *Ibid.*, p. 340.

⁹ Ibid., Vol. 2, p. 300; D. A. Mackenzie, Egyptian Myth and Legend (N. Y., 1907/1978), p. 162.

¹⁰ V. S. Apte, The Practical Sanskrit-English Dictionary (Delhi, 1975), p. 997.

¹¹ Linga Purana, I:61:40-45 (but see Volume One of the version translated by a board of scholars that was published in Delhi in 1973, p. 236).

¹² R. L. Thompson, Mysteries of the Sacred Universe: The Cosmology of the Bhāgavata Purāna (Alachua, Florida, 2000), p. 19

¹³ D. Teresi, *Lost Discoveries* (N. Y., 2002), p. 239.

aptly been described as "a bull's eye pattern," or "alternating concentric rings." Not surprisingly at this point in our reconstruction of these primordial entities, the seven *dvipas* are also associated with seven oceans. Unfortunately, due to the ambiguity with which these *dvipas* have been described in extant texts, they have also been misidentified as various other incongruous items. 4

As with the Egyptian Nile, the Gangâ, the great river of the Indian peninsula known to the western world as the Ganges, was also believed to have originated in the sky before it fell to Earth. While in heaven, Gangâ is believed to have traveled seven times around a central point known as Mêru.⁵ It is also said that Gangâ descended from the abode of the seven Rishis.⁶

In later times, proto-Saturn's rings were also compared to wheels as we find with the Hindu concept of deified Time known as Kāla. As Giorgio de Santillana and Hertha von Dechend clarified, Kāla can actually be identified with Yama, the Greek Kronos, and the Roman Saturn. And this Kāla is said to be endowed with seven wheels. Even the wind, which brings to mind the *ruach* of *Genesis*, is said to be endowed with seven wheels, lesewhere described as seven paths.

While Jainism holds itself separate from Hinduism, its modern elucidation of its ancient doctrines are just as convoluted and befuddled. Even so, in attempting to look through the confusing fog that has been spread by its adherents, we catch a glimpse of the Jaina cosmos, often misrepresented as "the universe," that is usually "explained as consisting of superimposed layers of heavens and hells" around what is again misrepresented as "a middle world." 12

This "middle world" constitutes the "central segment" of the Jainia cosmos which is described as "a thin disc" separated by rings of *samudra*. In the confusing style that has become common to this sect, *samudra* is now interpreted as "islands separated by rings of oceans."

In a situation that has become confused through years of repetition, the *samudra* is additionally described as being situated within what is now understood as "concentric rings of land, separated by further bands of oceans." And yet, the fact that these concentric rings are

¹ R. L. Thompson, loc. cit.

² *Ibid.*, p. 28.

³ Linga Purāna, 53: 28.

⁴ *Ibid.*, pp. 20-21, 24, 26.

⁵ F. Lenormant, "Ararat and 'Eden," The Contemporary Review (September 1881), p. 457.

⁶ Ibid.

⁷G. de Santillana & H. von Dechend, Hamlet's Mill: An Essay on Myth and the Frame of Time (Boston, 1969), p. 374.

^ĝ Ibid.

⁹ See D. Cardona, God Star (Victoria, British Columbia, 2006), pp. 262, 429, 434, 441, 446, 451.

¹⁰ Linga Puarana, 53: 39.

¹¹ *Ibid.*, 52: 4-8.

¹² J. A. B. Hegewald, "Images of the Cosmos: Sacred and Ritual Space in Jaina Temple Architecture in India," in D. Ragavan (ed.), *Heaven on Earth: Temples, Ritual, and Cosmic Symbolism in the Ancient World* (Chicago, 2013), p. 57.

¹³ *Ibid.*, pp. 58-59.

¹⁴ *Ibid.*, p. 60.

now infinitely numbered should not detract from their identification as proto-Saturn's sevenfold concentricity.

Even when we come to the cold regions of Alaska among the Inuit tribesmen known as the Yupik do we find vestiges of this ancient belief when we encounter their reverence of the series of concentric rings that are said to encircle what translators have rendered as the usual "universe" and/or "world," which rings are still claimed to "stand for the oceanic waters" that we now know to have actually been scrawled in the sky above.²

The confused nature that these events resulted in, while yet retaining a semblance of their original content, is well illustrated by Finland's national epic, the *Kalevala*, that was composed by Elias Lönnrot in the 19th century from whatever extant bits and pieces had survived in Finnish lore. As far as the event in question is concerned, we find it stated in this epic poem that, at the beginning of Creation, a mythical bird laid a set of eggs rather than the original cosmic one. Being too hot to lie on, these eggs were rolled "into the water...amid the waves of ocean" that we still recognize as proto-Saturn's circumstellar disk. When hatched these eggs produced what is described as "heaven" and "earth." And, not surprisingly, the number of eggs were actually seven, even though, in this instance, we encounter a new twist. As it is there stressed, six of these eggs were golden, but the seventh was described as having been "of iron." What this seems to imply is that one of the rings, probably the outer one, had a different appearance from the others.

PLEISTOARTISTIC REPRESENTATIONS

The Michelangelos of the Paleolithic era who painted and/or inscribed the realistic, but also artistically sophisticated, portrayals of animals in the caves of Altamira and elsewhere across the world, seem to have been exterminated during the catastrophic events that followed in the wake of proto-Saturn's cosmic outbursts. This is indicated by the portrayals of similar creatures in the following eras. One need not be an art specialist to notice the inferiority of these later executions.

Until they started to create their own canvases by plastering over rough surfaces, the most adequate areas that prehistoric artists could utilize for their presentations, both before and after proto-Saturn's flare-up, were natural stone slabs, loose boulders, and the more permanent rock faces they came across just about everywhere in their travels and the sites they settled in. Besides painting, however, they also learned to inscribe the figures they wished to portray through deep incisions in these rock surfaces. These are now known as petroglyphs, differing them from rock paintings that are known as pictographs.

The dating of rock art continues to be debated. As Alan Watchman reported during the International Rock Art Congress that was held at Cochabamba, Bolivia, in April 1997:

"Scanning the literature on the dating of rock pictures reveals a diversity of quantitative information about the precise locations from which samples were collected and of the

¹ *Ibid.*, p. 61.

² E. C. Krupp, Skywatchers, Shamans & Kings (N. Y., 1997), p. 55.

³ R. Van Over, Sun Songs: Creation Myths From Around the World (N.Y., 1980), p. 137.

treatments used to prepare carbon for measurement using accelerator mass spectrometry. Often little information is provided about the figure, size of sample and the nature of material collected, yet the results are published in ways that lead readers to believe [they] are reliable indicators of the age of particular rock art styles."

During the same congress it was noted that multiple petroglyph traditions had sprung up on the American continent by the late Pleistocene and early Holocene epochs.² Various dates have been supplied for most of the ones discussed during this congress, but, not long after, Robert Bednarik branded most of the techniques used in the dating of rock art as untrustworthy.³ As he noted in the abstract to an article he published in the *Journal of Archaeological Science* in December of 2002: "It seems that the most promising options [of rock art dating techniques] have attracted only limited interest, while those methods that have been afforded the most sustained research efforts have been discredited or provide only tenuous results." What can be maintained is that the earliest petroglyphs cluster around the late Pleistocene epoch at the end of the Ice Age that is itself burdened with slightly different dates by different authorities.

Quite a few archaeologists have explained these depictions as the hallucinations experienced by tribal shamans in altered states of consciousness. Thus, an international team that investigated the geometric patterns that are found in cave paintings came to the conclusion that the similarity of these patterns to one another across the continents was due to the artists having been high on drugs that biologically disposed them to experience near-identical visions no matter where they hailed from.⁵

Eventually, however, the ball was snatched from the hands of archaeologists by a team of physicists who studied a number of rock sites in the Kashmir Valley of Northern India and neighboring Pakistan. The conclusion that *this* team came to is that some of the depictions contained in these sites, which were dated to somewhere between the Paleolithic and Neolithic eras, refer to astronomical objects and/or events, including what appeared to them to be attempted representations of the Sun, the Moon, various constellations, meteoric impacts, and even supernovae.⁶

It can therefore be said that, generally speaking, some of these investigators did come close to the truth. After all, in view of the fact that, besides its highly controversial issue, at the time of this writing, the proto-Saturnian theory is hardly known outside a specialized coalition of enthusiastic advocates, it is not surprising that investigators of the petroglyphs under discussion would come so close to the mark without actually hitting it.

¹ A. Watchman, "A Universal Standard for Reporting the Ages of Petroglyphs and Rock Paintings," in M. Strecker & P. Bahn (eds.). Dating and the Earliest Known Rock Art (Oxford, 1999), p. 1.

² A. M. Tratebas, "The Earliest Petroglyph Traditions on the North American Plains," in *ibid.*, pp. 5 ff.; J. Schobinger, "Argentina's Oldest Rock Art," in *ibid.*, p. 53.

³ R. G. Bednarik, "The Dating of Rock Art: A Critique," *Journal of Archaeological Science* (December 2002), pp. 1213 ff.

⁴ *Ibid.*, p. 1213.

⁵ S. Rosenfeld, "The Stoned Age: Were Cavemen on drugs?" salon.com (July 14, 2013).

⁶ N. Iqbal, et al., "Some Early Astronomical Sites in the Kashmir region," Journal of Astronomical History and Heritage (March 2009), pp. 61-62, 64.

According to Anthony Peratt, petroglyphs and pictographs actually portray the plasmatic manifestations in the sky that so engrossed our ancient forebears and are to be dated somewhere between 7,000 and 3,000 years BC—that is, between 9,000 and 5,000 years ago.¹

It would have been incredible had the resulting concentricity of proto-Saturn's emitted debris not found its way into mankind's portrayals of these plasmatic manifestations. Not only that, but, to be sure, as it continues to be discovered, concentric circles are believed to be among the "oldest documented images" in various sites, such as at Legend Rock in central Wyoming, the petroglyphs of which have been dated to 10,000 years ago.² With various others in the same category, these depictions continued down through the ages as is indicated by the later inclusions on slabs at the Passage Grave at Knockmany, near Ballygawley, in Ireland.³ In fact, these figures, and others in relation to them, are much too numerous to be itemized in a detailed inventory.

EXPLANATORY GENERALITIES

The road to Saturn has not been all that smooth. There have been, as there continues to be, some differences of opinion among those who have been diligently researching the proto-Saturnian events we have been discussing. Some of us have even had to retract some of our original assumptions.

The reason I point this out is because the publications that contain these mistaken postulations can still be cited, and also criticized, by those who continue to come across them. After all, mistaken as they might be, they are still out there ready to trap those who might not realize that some of the items they contain have since been superseded. It would therefore be best to indicate what some of these differences and misconceptions—at least the ones in relation to what we have discussed above—happen to be.

Back in 1977, David Talbott had envisioned an original single ring surrounding the proto-Saturnian orb, and a sevenfold encirclement only toward the end of proto-Saturn's celestial reign.⁴ And, in 1984, I was just as much in error when I stated that "there was first one ring which later split into three and finally evolved into a sevenfold structure." As further research has indicated, it now seems clear that proto-Saturn's spiraling debris, which itself was described as having consisted of seven coils, resolved itself into just as many separate rings around Earth's proto-Saturnian sun right from the start.

Talbott had also stated that the multiple bands in question did "not actually revolve around Saturn." They only appeared to do so from Earth's perspective. To an extent, this would have

¹ D. Talbott & W. Thornhill, "Thunderbolts of the Gods," *Chronology & Catastrophism Workshop* (2004:2), p. 53; P. Clapham, "Reports on Talks by Wal Thornhill and Anthony Peratt: Spring Lecture Meeting 21st May 2005," *Chronology & Catastrophism Workshop* (2006: 1). p. 10.

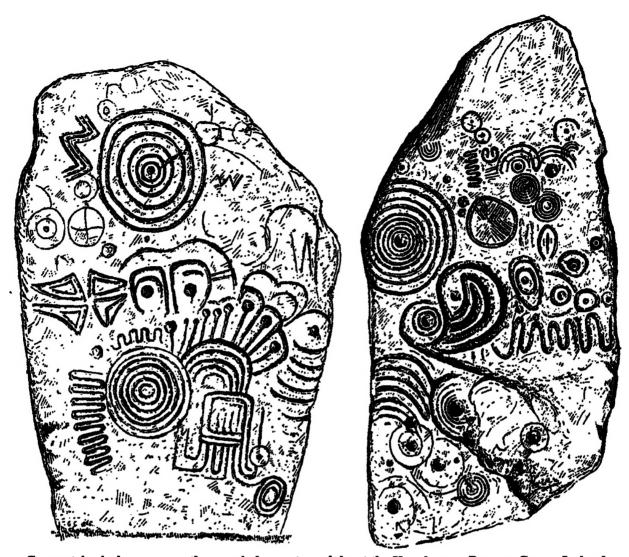
² M. Fitzgerald, "Portals to Other Realities: Legend Rock Carries 10,000 years of Profound Beliefs," wsj.com (September 18, 2010).

O. G. S. Crawford, The Eye Goddess (Oak Park, Illinois, 1991), p. 91.

⁴ D. N. Talbott, "Saturn: Universal Monarch and Dying God," Research Communications Network (1977 special publication), pp. 10-11.

⁵ D. Cardona, "Saturn: In Myth and Religion," KRONOS X:1 (Fall 1984), p. 7.

¹ D. Talbott to M. Zysman (private communiqué, April 4, 1987), published in "Saturn Myth—A Challenge to the Planetary Hypothesis," *Kataklysmos* (May 19, 1987), p. 23.

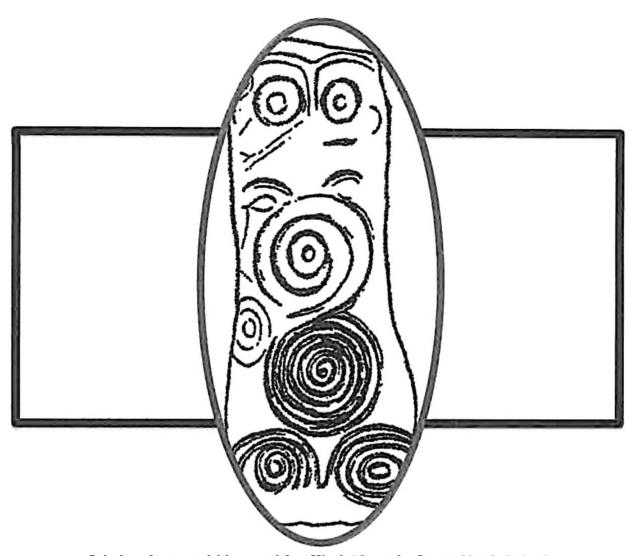


Concentric circles, among other symbols, on stone slabs at the Knockmany Passage Grave, Ireland.
(Illustrations by the Reverend Abbé Breuil.)

been true since, as we have already indicated, proto-Saturn's spiraling emission was ejected out of its Earth-facing southern axial pole. The spiral would therefore have originally formed beneath proto-Saturn, but, due to perspective, ancient man would have had no way to determine that it was so. However, as we have already indicated, judging by what we see transpiring in supernovae such as that of RS Ophiuchi, as also through one of Kristian Birkeland's terella experiments, proto-Saturn's resulting separate rings were eventually captured around it in equatorial orbit.

In passing I should also mention Peratt's belief that the concentric rings he naturally found included in the world's petroglyphic representations were etched in memory of the cross-sectional appearance of an immense diocotron instability that spread across the sky. Without

¹ A. L. Peratt. "Characteristics for the Occurrence of a High-Current Z-Pinch Aurora as Recorded in Antiquity," *IEEE Transactions on Plasma Science* (2003), pp. 1209-1210, 1212.



Spirals and concentricities on a slab at King's Mountain, County Meath, Ireland.
(Illustrations by the Reverend Abbé Breuil.)

going into unnecessary technical details that would mean little to most of my readers, it can be said that this concept is invalidated by the Earth-related perspective from the different terrestrial latitudes across which these depictions were etched in stone.¹

One other item concerning which I was entirely wrong back in 1984 was my understanding that proto-Saturn's resultant primordial rings "were not the rings which presently encircle the planet," which words I actually emphasized. As of this writing I can safely state that, while proto-Saturn's ring system continued to evolve down through the ages, the planet's present rings are definitely the evolutionary result of its primordial encirclement.

¹ See here, for instance, M. A. van der Sluijs & R. J. Johnson, "Geometry of an Intense Auroral Column as Recorded in Rock Art," *Journal of scientific Exploration*, Vol. 27, No. 2 (2013), pp. 234-235.

¹ D. Cardona, loc. cit.

As of this writing, close-up views of the planet Saturn and its rings that have been obtained through instruments aboard space vehicles have been giving astronomers a revolutionary insight into what they had once believed to be settled issues. As described by Jeremy Hsu, the views that the instruments aboard the Cassini spacecraft sent to Earth showed quite clearly that the rings around Saturn "appear less like orderly lanes of traffic and more like highways from Hell." More to the point of our unfolding scenario, some of Saturn's present rings, in accord with their primordial characteristics, have actually retained their spiraling nature.

In the meantime, the fact that Saturn is now known to possess more than a thousand rings should not detract from their having been numbered as seven by the prehistoric societies we have been discussing. While the rings are very nebulous in nature, they would have been seen to clump together in fewer assemblages to the naked eye from a distance. This is so much so that, even at present, these thousands of rings appear to bunch together in seven main concentricities. The "seven broad bands" that make up Saturn's ring system, so Jeffrey Kluger clarified, "are not undifferentiated masses of material but rather are made up of hundreds of individual strands, like the grooves in a record album." That was in 2004, but, as already stated, those "individual strands" are now numbered over a thousand.

There is also an indication that the proto-Saturnian rings were actually seen to rotate. Thus, for instance, the divine court of Osiris/Saturn was known as the *shenit*,⁵ a term that is related to *shenu* and *shen-t*, the meanings of which are given as "circuit," "circle," "periphery," "circumference," but also as "orbit," "revolution," "a circuiting" and "a going round."

¹ J. Hsu, "Saturn Surprises Spur Cassini Mission Reprise," space.com (July 7, 2008).

² New Scientist (January 28, 1982), p. 235.

³ J. Kluger, "Secrets of the Rings," TIME (July 12, 2004), p. 28.

⁴ *Ibid* n 31

⁵ E. A. W. Budge, An Egyptian Hieroglyphic Dictionary, Vol. II (N. Y., 1978), p. 744.

⁶ *Ibid*., p. 743.

Chapter 15

The Sibitti

SEVEN BOUND IN THREE

I would not be accurate to claim that seven was the only number of heavens that ancient societies ended up reporting from around the world. There are quite a few traditions that speak of these heavens as having actually been less or more than seven in number. It is not that the seven bands that formed around Earth's primeval sun were not prominent enough, but, for one thing, as we aim to show, there were other emanations that accompanied proto-Saturn's spiraling debris that were later confused with the rings by those who had not witnessed their formation. For another, the particular formation in which the seven rings eventually developed gave rise to numerical complexities that eventually led to a certain amount of confused accounts. This had little, if anything, to do with the ensuing ambiguities of oral traditions, but more with the attempted comprehension of those who came later. As we have stressed right from the start, those who later came upon these ancient reports would have looked up at the sky to see nothing there with which to compare what their ancestors had described. They would have done their best to understand, just as modern mythologists continue to do, but confusion was bound to set in, as it persists into the present.

Engravings of three concentric rings rather than seven are to be found among the petroglyphs and other sacrosanct depictions around the world. In India, these three concentric circles are identified as a symbol of Mahadeo, meaning "Great God," that is one of the epithets of Shiva. So, similarly, with Vishnu, of whom it is written that he "verily upholds the threefold" aspect of what has been interpreted as "the earth" and "the heaven."

Yama is explicitly described as being bound in heaven by three bonds.³ Varuna is lauded by a phrase that reads: "Three spheres of light...three heavens, three firmaments, ye comprehend." And, as stated in a generalization encompassing all those in heaven, the gods are stated to have their "home in the three lucid realms of heaven." ⁵

As Edwin Krupp rightly noted:

"We can find this same basic idea of three cosmic zones from Siberia to Mesoamerica, from Africa to Mediterranean Europe. In one variation or another, with nuances to suit local preferences, this concept shows up all over the world."

¹ J. H. Rivett-Carnac, "Archaeological Notes on Ancient Sculpturings on Rocks in Kumaon, India," *Journal of the Asiatic Society of Bengal* (1883), p. 15.

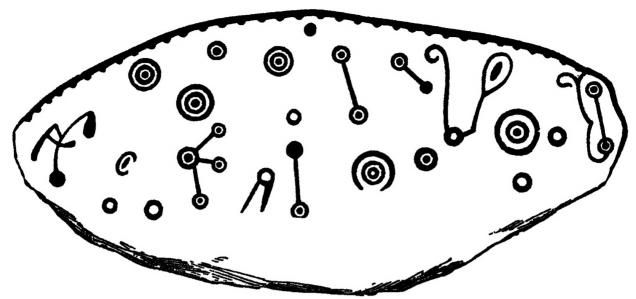
² Rig Veda I:154:4.

³ *Ibid.*, I: 163:4.

⁴ Ibid., V:69:1-2.

⁵ *Ibid.*, I:105:5.

¹ E. C. Krupp, Beyond the Blue Horizon (N. Y., 1991), p. 278.



Petroglyph from Georgia, U.S.A., depicting three-ring concentricities. (Illustration by Charles Jones, Jr.)

Or, as even Marinus van der Sluijs noted:

"Various ethnic groups of the Arctic and North America likewise envisioned the cosmos as a set of circumambient discs; the Chukchi (northeastern Siberia), for instance, conceived of 'three worlds...represented by three concentric circles'."

The concept that Krupp refers to can actually be traced to Mesopotamia where we find allusions to three heavens, each one of which was allotted to one of three divinities, Anu, Enlil, and Ea.² As already stressed, these three deities are identifiable as different aspects of the Saturnian one, as so, also, is the Indic Shiva, known as Mahadeo. Truth be told, however, the belief in these three heavens stems from a misunderstanding as shown in what remains of the Kisir-Aššur document where it is distinctly stated that each of these three divisions consisted of more than one heaven.³

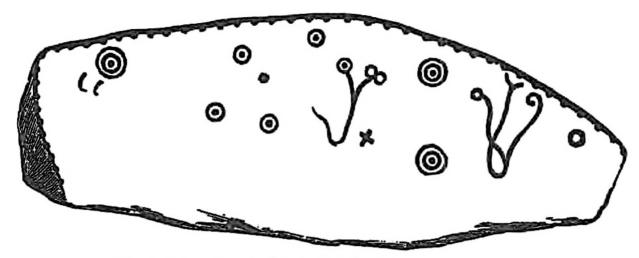
That the total of these three sets of heavens numbered seven is shown in a passage of the Hindu Atharvaveda which describes the loops that bound Varuna, also identified as Saturn, as being seven but spread out in three. As it is written, "seven by seven, threefold, [they] lie spread out." Or, as Alfred Ludwig translated the same verse, even though originally in German, the "cords" that Varuna "stretched out" are "spread out by sevens threefold, clear

¹ M. A. van der Sluijs, *Traditional Cosmology*, Vol. Three (London, 2011), p. 5; W. Bogoras, "The Chukchee," *The Jesup North Pacific Expe3dition: Memoirs of thge American Museum of Natural History*, 7 (1904-1909), p. 311, as cited in *ibid*.

² W. Horowitz, Mesopotamian Cosmic Geography (Winona Lake, 1998), p. 8.

³ *Ibid.*, pp. 3-4.

¹ Atharvaveda, IV:16:6.



Petroglyph from Georgia, U.S. A., depicting three-ring concentricities. (Illustration by Charles Jones, Jr.)

and shining." This is additionally borne out by the above-mentioned ring-shaped regions of the Hindus known as *dvipas* that, besides being seven in number, are said to be surrounded by three larger ring-shaped regions which extend out to the edge of Bhū-mandala. That the Bhū-mandala is the "shell" of the Brahmanda, that is the central region of the abode of Brahma, whom we have already identified as one of various aspects of the proto-Saturnian deity, is well known to those versed in Hindu sectarianism.

Matters developed differently in China. The book that Lao-Tze compiled during his long life of meditation, the *Tao Te King* (otherwise transcribed as *Tao Te Ching* or *Dao De Jing*), formed the basis of the ensuing Taoist religion. To give Frank Dobbins' nineteenth century exposition of the subject, the work in question "is a metaphysical treatise, and its meaning is very obscure." As he goes on: "There is much of materialistic speculation, magic and divination in this book." The first chapter, however, recounts the nameless and indescribable Tao we have already touched upon that is here reported to have been the genesis of heaven and earth. And, as it is there stated: "Tao produced one, the first great cause; one produced two, the male and female principles of nature; [and] from the two came three, and the three produced all things that are in heaven and [what eventually became known as] earth."

Just in case there will be those who will think that the above explanation stretches things a bit too far, keep in mind that, even at present, while Saturn's multifold rings cluster into seven

¹ A. Ludwig, *Der Rigveda*, Vol III (Prague 1876-1888), p. 388 (emphasis added).

² R. L. Thompson, Mysteries of the Sacred Universe: The Cosmology of the Bhaāgavata Purāna (Alachua, Florida, 2000), p. 19

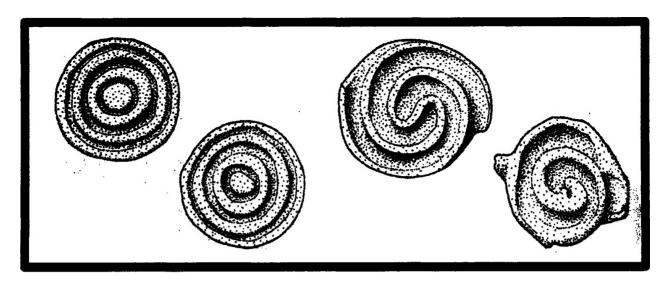
³ Ibid.

¹ Ibid., p. 2.

⁵ F. S. Dobbins, Error's Chains: How Forged and Broken (N. Y., 1884), p. 428.

[&]quot; Ibid.

^{&#}x27; Ibid.



Impressions of clay stamps—left to right, from Tell Halula, Sesklo, Çatal Hüyük, and Nea Nikomedeia—showing the three-ring system around the central orb and the spiral from which it was formed.

(Illustrations courtesy of G. Monthel.)

major ones, these very seven clusters are additionally compacted into three main concentricities that astronomers have simply labeled as A, B, and C. These are designated to demarcate the division between the outer A ring and the fainter inner C one, with the denser B ring between the two.¹ In fact, midway between the twentieth century it was still being touted that: "Broadly speaking, there are three main [Saturnian] rings: a greyish one, known as ring A; a very bright one, known as ring B; and a dark inner ring, C, known also as the Crêpe ring, through which the globe of the planet can actually be seen."

OTHER HEAVENS

Some of the natives of the Philippines supply a good example of the manner in which ancient accounts can become confused since, according to them, the "layers" above our world number four, while the number of those beneath it remain unknown.³ The layers they believe to lie beneath the world are definitely due to a misunderstanding of what the original so-called netherworld alluded to. The four layers above, however, are probably derived from the addition of the proto-Saturnian sphere itself to the three combined bands around it.

Somewhat similarly, the British Columbian Bella Coola Indians also believe in four layers of heaven, two above and two below the world, and that these, together with the world at their centre, therefore make five. In a comparable vein the Kogi of Colombia, in South America, believe that there were four layers above and four layers below the world, with the world itself

¹ Although this is well known, see F. Guterl, "Saturn Spectacular," Discover (August 2004), p. 41.

² L. Rudaux & G. de Vaucouleurs, Larousse Encyclopedia of Astronomy (London, 1966), p. 221.

³ H. O. Beyer, "Origin Myths Among the Mountain Peoples of the Philippines," *The Philippine Journal of Science*, Vol. 8, No. 2 (1913), pp. 98-99.

¹ F. Boas, "The Mythology of the Bella Coola Indians," Memoirs of the American Museum of Natural History (1900), p. 27.



Three concentric circles which, with the central orb, could later have been mistaken for four.

Copied from a petroglyph in Utah.

thus making for a ninefold enclosure. And the natives of the Tuamotu Islands of French Polynesia have their Creator, named Kiho, floating on the water while giving rise to eight sky realms and eight land ones. 2

Traditions of ten heavens, such as the one found in Mangaia, one of the Cook Islands in the South Pacific,³ are also known, as so are eleven foundations by other Polynesians,⁴ and the thirteen layers of the Maya.⁵

What needs to be pointed out is that most, but not all, of the traditions that speak of the heavens as having been other than seven in number actually derive from recognizable numerical readjustments of the integers three and seven when not in conjunction with the central sphere itself. In order to give but one example of the above, we point to the Dogon of West Africa who believe heaven to be composed of fourteen terraces. What is not surprising is that the Dogon are not the only indigenes who hold on to this belief. Some Hindu sects also do. But here's the thing:

As we learn from a significant Puranic account, the Hindu belief in fourteen terraces, heavens, or worlds, was derived from the splitting of the original seven into two separate partitions. As it is there intimated, the cosmogonic egg we have already discussed is believed to have "divided into two halves," separating the celestial from the terrestrial zones that together constituted what became known by some as "the fourteen worlds." Nevertheless, despite all that, as van der Sluijs, who does not even hold to our proto-Saturnian scenario, has had reason to attest, when we look back to Near Eastern traditions, which happen to be the oldest that we know of, "the number of heavens was almost universally given as seven."

¹ G. Reichel-Dolmatoff, "The Great Mother and the Kogi Universe: A Concise Overview," *Journal of Latin American Lore*, Vol. 13, No. 1 (1987), pp. 102, 85-86.

² B. C. Sproul, *Primal Myths: Creation Myths Around the World* (San Francisco, 1979), pp. 338-339.

³ D. Teresi, Lost Discoveries (N. Y., 2002), pp. 180-181.

⁴ *Ibid.*, p. 182.

⁵ *Ibid.*, 186.

⁶ E. C. Krupp, loc. cit.

¹ The Linga Purana (as translated by a board of scholars), Part I (Delhi, 1973), p. xix; see also the Linga Purana itself, I:53:48-52.

² M. A. van der Sluijs, *Traditional Cosmology*, Vol. Three (London, 2011), p.18.



Petroglyph from Chiriqui, Panama, where the three concentric rings plus the central orb could also have led to four.

OTHER SEVENS

One could say that the number seven impressed, enthralled, overwhelmed ancient man so much that it became for him the most referred, even venerated, although also mystifying, numeral. This is so true that, in his seven-volume opus of Jewish legends, Louis Ginzberg lists over one hundred-and-thirty instances of the number seven. But even that pales when compared to the actual Hebrew version of the Old Testament which contains over seven hundred mentions of the number seven. Not all these sevens were, however, reserved for the number of heavens, despite their oft-hidden retention to their original association with the seven encircling rings even if not always so defined.

Although, understandably enough, mythologists continued to associate the ancients' tenacity to the number seven as representative of the planets, there were those who came close to hitting the proverbial nail on the head.

"This concept of seven and heaven," Peter Lancaster Brown tells us "was still important to the late Babylonians, for the brick Ziggurat of Nabu, at Barsipki |also called Birs Nimrud, now known as Borsippa|, was revered as the 'House of the Seven Bonds of Heaven and Earth' and was believed to have been painted in seven different colours." So, likewise, Henry Rawlinson who described the same ziggurat as having consisted of "seven distinct stages, one upon the other, symbolical of the concentric circles of the seven spheres, and each colored with the peculiar tint which belonged to the ruling planet."

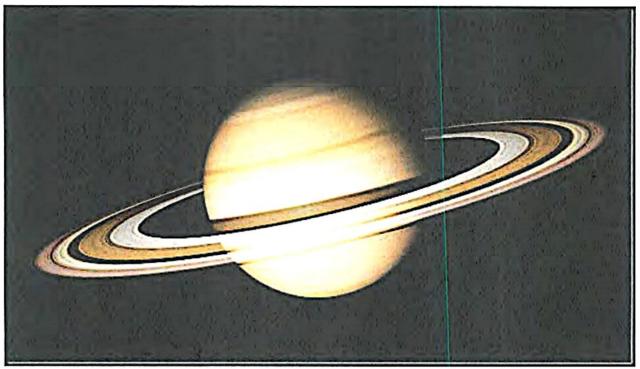
Even the misconstrued seven days of Creation continued to be celebrated down into historic times. Yearly festivals associated with Babylonian temples, such as the one commem-

¹ L. Ginzberg, The Legends of the Jews, Vol. VII (Philadelphia, 1967), pp. 426-428.

² F. D'Andria, "Conversion, Crucifixion and Celebration," *Biblical Archaeology Review* (July/August 2011), p. 43

¹ P. L. Brown. Megaliths and Masterminds (N. Y., 1979), p. 207 (emphasis as given).

² H. C. Rawlinson, "On the Birs Nimrud," Journal of the Royal Asiatic Society, Vol. 18 (1861), p. 18.



The planet Saturn with its multitudinous rings grouped into three main clusters (Photograph courtesy of NASA.).

orating the inauguration of the one dedicated to Ningirsu, were consistently made to last exactly that long.¹

The unanimity of myth leaves little to be desired. We have already had reason to mention the Seven Wise Ones of Egypt, and although they were said to have been born in the water,² that to us connotes the celestial ocean, they were also claimed to have sprung from Ra.³ What is of additional interest is that, when we move to India, we come across the Hindu belief that Brahma also gave birth to Seven Sages, that is wise ones, known as Rishis.⁴

Another name that these seven Rishis were known by is Prajapatis.⁵ In its singular form, Prajapati, as the Creator, was actually a title of the very Brahma, whom we now know to have been the Saturnian deity. To us this has additional meaning since the Seven are here given the plural form of one of Saturn's very own names. More than that, the Rishis were described as having been set in a circle, so that one reads of "the circle of the Seven Sages." And: "Seven tracks have the Wise Ones made."

Seven Wise Ones were also known to the Assyro-Babylonians among whom they were

¹ See, for instance, P. Bourboulis, Ancient Festivals of 'Saturnalia' Type (Salonica, 1964).

² E., A. W., The Gods of the Egyptians, Vol. I (N. Y., 1904/1969), p. 516.

³ Ibid.

⁴ W. D. O'Flaherty, Hindu Myths (Harmondsworth, 1976), pp. 141, 353.

⁵ Ibid., p. 353; V. Ions, Indian Mythology (London, 1967), p. 118.

W. D. O'Flaherty, op. cit., p. 350.

² *Ibid.*, 131.

³ A. Ludwig, op. cit., p. 394.

known as the Sebettu or Sibitti. Their very name connotes the very number seven: saba or seba in Semitic languages; sibun and sieben in Germanic ones; sapta and saptan in Sanskrit. In fact, the seven Rishis of the Hindus are also known as Saptarshis.² The Jewish sabbath, the seventh (day), derives from the same root, as so does the very Jewish name, that is Shabtai, the Sabbath Star, of the planet Saturn.³

The Sebettu were said to have laid "the foundation of ramparted Uruk." Giorgio de Santillana and Hertha von Dechend tell us that there is a "haunting suspicion" that Uruk stood for a realm of the dead.⁵ That would make Uruk akin to the Egyptian Duat that we have already seen to have been stationed in the sky. A celestial Uruk would not be out of keeping with Mesopotamian belief. All Babylonian cities are known to have had their mytho-historical prototype in heaven.⁶ What is interesting here is that Uruk, which the Seven Wise Ones were said to have founded, was encircled by seven walls.

The Buddhist paradise of Amitabha is described in similar terms. This paradise, which was a veritable celestial "world," is believed to be "embellished with seven ranges of terraces" enclosing lotus pools the margins of which are constructed out of seven iewels.8

The bruidne, or celestial abodes, of the Celtic deities, the singular of which is bruiden, were said to be constructed in concentric circles. That of Mac Da Tho was said to possess seven doors. Seven roads are also said to run through it. The bruiden of Da Derga also contains seven doorways, and seven rooms to boot. That of Medb, however, was described with less ambiguity. This deity's celestial abode was explicitly said to have been constructed of "seven circles and seven compartments from fire to partition." That Medb was a female deity need not disturb us since, as we shall see, she actually abided in God's encircled domain.

RESULTING RAMIFICATIONS

The apparition of the seven circles was so impressive that the imagery continued to be made use of in the religious writings of the early Judeo-Christians. Among the Jews, the number seven became a virtual scapegoat for anything that smacked of celestial or godly significance. Thus we read of the seven pre-existing objects before Creation, the seven attributes of God, seven bands of archangels and seven creatures in the midst of them, seven

¹ H. Zimern, "Die Sieben Weisen Babyloniens," Zeitschrift fur Assyriologie und Vorderasiatische Archaeologie, Vol. 35 (1923), p. 153.

² V. Ions, loc. cit.

³ See, for instance, W. A. Heidel, *The Day of Yahweh* (N. Y., 1929), p. 465.

⁴ Sha Nagba Imuru (Epic of Gilgamesh), I: 19.

⁵ G. de Santillana & H. von Dechend, Hamlet's Mill: An Essay on Myth and the Frame of Rime (Boston, 1969), p. 304.

⁶ See here M. Eliade, *The Myth of the Eternal Return* (London, 1955), pp. 7-8; L. M. Greenberg & W. B.

Sizemore, "Cosmology and Psychology," KRONOS Vol. I, No. 1 (Spring 1975), pp. 34-35.

⁷ G. de Santillana & H. von Dechend, op. cit., p. 301.

⁸ H. Maspero, "The Mythology of Modern China," Asiatic Mythology (N. Y., 1972), p. 380

⁹ T. P. Cross & C. H. Slover, Ancient Irish Tales (N. Y., 1969), pp. 199-207.

¹⁰ Togail Bruidne Da Derga, as translated by W. Stokes, Revue Ce; tique, Vols. XXII & XXIII (Paris, 1901-1902).

¹¹ Fled Bricrend, as translated by G. Henderson, Irish Texts Society (London, 1899), pp. 69-70.

angels of confusion, seven female demons, the seven cities founded by Enoch, the seven holy places of Israel, and many others.

Down through the ages quite a few of these attributes continued to be shared by both Judeo-Christianity and paganism. Thus, for instance, what became misunderstood as the seven days of Creation resulted in the seven days of the Greek Kronia and the Roman Saturnalia, annual festivals that were named after the very Saturnian deity they were meant to commemorate. When Christianity spread over Europe, the observation of this festival was appropriated by that of Xmas which was originally observed for the same amount of days.

To this very day the number seven continues to be endowed with mystical properties which explains our frequent encounter with such items as the seven gods of fertility, the seven seals, the seven deadly sins, and many others.

In the end, the number seven came close to losing its sanctity, but it continued to haunt humanity down into modern times. We even find it resurfacing in the modern superstition connected with the sport of surfing as "the seventh wave."

Chapter 16

God's Primordial Dwelling

MAZAL KHIMA

n old Biblical enigma that has confused most of those who have attempted to interpret its hidden meaning is contained in one of the most referenced book of the Old Testament where, in testing the faith of the suffering man called Job, the Lord is said to have asked him: "Canst thou bind the sweet influences of Khima?"

Both the King James version of the Old Testament and the English version of the Douay account translate Khima as the star formation known as the Pleiades. Khima is again mentioned elsewhere in the same book,² but whereas the King James retains the Pleiades in its translation, the Douay here renders Khima as the star cluster of the Hyades.

Khima is also mentioned in the Book of Amos,³ where the King James version sticks to the seven stars of the Pleiades, whereas the Douay, forsaking both the Pleiades and the Hyades, has Khima as the star Arcturus. It therefore becomes obvious that the translators of the Old Testament had no inkling as to what Khima really stood for.

One can argue that the King James and Douay versions of the Old Testament are so late that they cannot be relied upon for any useful information. But even if we had to go back to the older Vulgate version, we find that matters are no different since Khima is there rendered as Pleiades in one instance, as Hyades in another, and as Arcturus in a third. These identifications are identical to those in the Douay, which version actually derived from it.

Back in 1950 Immanuel Velikovsky had no doubts about the subject. As he stated in Worlds in Collision, even if only in a footnote: "The material for the identification of Khima as Saturn...will be presented in a subsequent part of this work." But since the "subsequent part" was never published, Velikovsky's suggested identification remained unsubstantiated for close to thirty years.

Writing in 1973, Donald Patten, in collaboration with R. R. Hatch and L. C. Steinhauer, also came to the conclusion that Khima is to be understood as a planet. When it came to identifying the planet, however, Patten and his colleagues differed from Velikovsky. Their "supposition" was that Khima stood for the planet Venus. And although Martin Sieff took Patten and his cohorts to task concerning their reconstruction of Earth's catastrophic past, he still ended up agreeing with them in identifying Khima as Venus. Our disagreements with

¹ Job 38:31.

² Ibid., 9:9.

³ Amos 5:8.

⁴ I. Velikovsky, Worlds in Collision (N. Y., 1950), p. 208.

¹ D. W. Patten, et al., The Long Day of Joshua and Six Other Catastrophes (Seattle, 1973), p. 204.

² M. Sieff, "Planets in the Bible: 1—The Cosmology of Job," Society for Interdisciplinary Review, I:4 (Spring 1977), p. 18.

Patten and Sieff were aired in 1978, and, in consideration of what is to follow, there would be no point in repeating them.

When Velikovsky learned that KRONOS was about to publish my own paper on the subject, he did not wish to be pre-empted and he thus convinced Lewis Greenberg, the Editor-in-Chief of KRONOS, to publish his long awaited material on Khima's correct identity in the same issue of the periodical, but ahead of mine.²

Writing with Samuel Windsor sometime after all these publications, Patten exhumed the issue with new translations and a new set of planetary identifications. There is no point here to go into all that,³ just let it suffice that Patten and his co-author dropped the identity of Khima as Venus in favor of its having really been the planet Saturn, although nowhere do they acknowledge Velikovsky's priority to this claim.⁴

What, however, was Velikovsky's evidence concerning Khima's identification as the planet Saturn? First of all, as he rightly informs us: "In the rabbinical literature Khima is referred to as *Mazal* Khima." And, besides being the Hebrew word for "constellation," *mazal*—plural *mazzalah*—also means "planet. As to which planet Khima was, Velikovsky's evidence lies beyond the chronological reconstruction we have been following, and to present it at this point would only cause confusion. However, in order to keep the above from turning into the proverbial teaser, let me point to an earlier researcher that neither Velikovsky, nor Patten, or for that matter Sieff, had as much as laid a finger on.

Way before any of the above contenders, George Rawlinson had already realized that Ea, who in his time was read as Hoa, was not only revered as "the king of rivers," but also as "the lord of the abyss," or of "the great deep," which, as he also correctly surmised, "does not seem to be the sea, but something distinct from it." As he also correctly understood, one of Hoa/Ea's emblems "is the serpent." Although he could not have been aware of the proto-Saturnian scenario that was formulated well after his time, what he discerned in the above merges neatly with what we have been establishing up to this point.

More importantly, however, was Rawlinson's intuition that the "stellar name of Hoa was Kimmut"—now read as (Mul) Nun-ki—and although he was mistaken in associating this with the stellar constellation Draco, he did correctly connect it with the Kimah—that is Khima—of the Old Testament. As convoluted as all that sounds to the uninitiated, what Rawlinson's identification really boils down to is that Khima was equivalent to Hoa/Ea/Saturn.

On the other hand, despite Sieff's misidentification of Khima as the planet Venus, he was quite correct in other matters concerning the subject at hand. We thus return to the quotation

¹ D. Cardona, "The Mystery of the Pleiades," KRONOS, III:4 (Summer 1978). pp. 25 ff.

² I. Velikovsky, "Khima and Khesil," KRONOS, III:4 (Summer 1978), pp. 19 ff.

³ Those interested can peruse D. Cardona, "The Methodology of Patten's Martian scenario," AEON, II:4 (May 1991), pp. 77 ff.

⁴ D. W. Patten & S. R. Windsor, "The Organization of the Solar System," AEON I:4 (July 1988), p. 79.

⁵ I. Velikovsky, loc. cit., p. 19 (emphasis added), where the reference he supplies for this contention is given as J. Levy, Wörterbuch über die Talmudim und Midrashim (Berlin & Vienna, 1924), entry under "Khima."

⁶ Ibid.; see also J. Strong, Hebrew and Chaldee Dictionary (Madison, N. J., 1890), p. 64.

⁷ G. Rawlinson, The Seven Great Monarchies of the Ancient Eastern World, Vol. I (N. Y., 1885), p. 79.

⁸ Ibid.

¹ Ibid.

from the Book of Job that formed the impetus of the present section: "Canst thou bind the sweet influences of Khima?" What Sieff has ingeniously realized is that the Hebrew ma-adanot, translated as "sweet influences," is probably a corruption of ma-anadot, which means "chains" or "knots."

Given that the above is correct, with which we agree, the confusing Biblical passage with which we are presently concerned would have the Lord challenging Job, in retaliation to what some would have seen as his arrogance, with the words: "Canst thou bind the chains of Saturn?"—in other words, "as I did." Or, better still, "Canst thou bind Saturn with chains?" Additional to that, Sieff also suggests that the Hebrew name Khima might itself be connected to the Assyrian kamu—meaning "he bound"²—which leads us to the following peculiarity.

THE BOUND AND BINDING GOD

To my knowledge, the identification of the cosmogonic egg as the primeval ring of light that ended up surrounding the proto-Saturnian orb was first proposed by David Talbott.³ That, in itself, does not contradict our own supposition, as earlier described, that the concept of the egg in question actually stemmed from the appearance of proto-Saturn's shrunken circumstellar disk. After all, once it commenced to shrink, that disk actually formed a detached encirclement around Earth's primordial sun. This encirclement became even more prominent since the set of circumventing rings that evolved out of proto-Saturn's spiraling debris ended up merging with it.

In conformity with this understanding, we point to *khalamuth*, an ancient Hebrew word for "egg" that is derived from *khalam*—both words variously transcribed—the latter of which means "to bind." Together with the binding of Khima as derived above, this, again, has special meaning since it was the resulting encircling bands we have been discussing that ended up "binding" the Creator. In fact, despite Aimo Nurtonen's disputation, the Hebrew Creator's name of El had earlier been suggested by Otto Procksch to be derived from a root meaning "to bind."

Be that as it may, Hebrew tradition is not entirely silent on this aspect of Creation since it has for long been documented that "the most Holy One" brought into being what eventually came to be misconstrued as "the world" very much "like an embryo" that is said to have grown in a spiraling fashion.¹

Although incorrectly understood by Mircea Eliade as having done so by "magic incantations," Ea/Saturn has been lauded, among others things, as a god who binds.² So, also,

¹ M. Sieff, op. cit., p. 19.

² Ibid.

³ D. N. Talbott, *The Saturn Myth* (N. Y., 1980), pp. 67-68.

⁴ J. Strong, op. cit., p. 40.

⁵ A. Murtonen, A Philological Treatise on the Old Testament Divine Names (Helsinki, 1952), pp. 34-35.

⁶ O. Procksch, Theologie des Alten Testaments (Gütersloh, 1950), p. 444.

¹ J. Purce, The Mystic Spiral (London, 1974), p. 17.

² M. Eliade, *Images and Symbols* (London, 1952), p. 109; *idem*, *Patterns in Comparative Religion* (London, 1996), p. 81.

with Shamash who was believed to have been armed with snares and cords to whom prayers were addressed "for the liberation of those who are bound." Tammuz, too, was called "Lord of the snares," even though he himself was bound and prayed to be saved from such bonds.² Even Ninurta was deified as a hunter (habilu) because he hunted with a snare (nahbalu). In Hebrew, "rope" is still known as khabel, otherwise chebel, while it is habl in Arabic and habel in the Semitic-derived language of the Maltese islanders.

It was no different in India where Yama, the Hindu Saturn, was known as the god who binds. So also was Varuna, who was additionally lauded as the "all-enveloping" god.

When we move to Europe we come across the Thracian god Darzales, also known as Derzelates, who derives his name from *darezeiti*—"to bind"—and *darez*—"cord" or "snare." At Tomis, which is the historical name of Romania's city of Constanţa, rings have been found that bear the interpretive inscription *Derzo*. Thus the ancient Roman custom of binding the statue of Saturnus with woolen bonds, which custom has given rise to various contradictory interpretations, becomes quite understandable.

THE RITES OF BINDING

Just as the envisioned disemboweling of the proto-Saturnian deity gave rise to ritual cannibalism, so did the god's encirclement give rise to some very strange rites and customs.

Throughout history, the monarchs of the ancient world were wont to identify themselves with whatever planetary deity was in their time believed to have been consummate in the ancient sky. In some cases, the god's binding characteristic was believed to be of great significance. It is also relevant to keep in mind that, in Roman times, the fear of cosmic catastrophism was still eminent. In view of all that, it does not prove much of a surprise to learn that, according to Plutarch, Romulus himself, the traditional founder of Rome, played the part of the binding god. Guards armed with rods used for keeping back the crowd were said to have always walked in front of him. These same guards were also girded with straps, ready to bind those whom he ordered them to bind.²

According to Cornelius Tacitus, the Semnones, an ancient people of Prussia, could only take part in their great annual religious festival after having been bound.³ The same Roman

¹ Idem, Images and Symbols (London, 1952), pp. 108-109.

² *Ibid.*, p. 109.

³ J. Lewy, "The Old West Semitic Sun-God Hammu," *Hebrew Union College Annual*, Vol. XVII (Cincinnati, 1943-1944), p. 433.

⁴ J. Strong, *op. cit.*, p. 36.

⁵ M. Eliade, op. cit., p. 99.

⁶ Ibid., pp. 92-99, 102, 106; idem, Patterns in Comparative religion (London, 1996), pp. 69-70, 428.

⁷ W. D. O'Flaherty, *Hindu Myths* (Harmondsworth, 1976), p. 356.

⁸ M. Eliade, op. cit., p. 103.

⁹ Ibid.

¹⁰ See, for instance, H. H. Scullard, Festivals and Ceremonies of the Roman Republic (London, 1981), p. 206.

¹ M. Eliade, The Myth of the Eternal Return (London, 1955), pp. 133-134.

² Plutarch, Romulus, in his Lives of the Noble Romans, 26.

³ Cornelius Tacitus, Germania, 39.

historian tells us that the Chatti, members of an ancient German tribe, who were also known as Hessians, or Hessi, had to bear an iron ring as a chain until they had slain their first enemy.¹ In another work of his, the same author describes the ritual binding of the ancient Armenian kings,² which tells us that, even when visualized as having been bound, god and king were not always necessarily envisioned as being, or having been, subjugated. Strabo also mentions the ritual shackling of the Albani.³

It is therefore in no way speculative to claim that the traditional custom behind the inauguration of Tahitian rulers was evocatively instituted in simulation of the bound proto-Saturnian deity. The Tahitian investiture concerning the coronation of its traditional tribal chiefs consisted in girding the ruler-to-be with the *maro ura*, a sacred girdle of red feathers which is said not only to have "raised him to the highest earthly station," but to have "identified him with their gods."

"The maro thus became sacred, even as the person of the gods, the feathers being supposed to retain all the dreadful attributes of power and vengeance which the idols possessed, and with which it was designed to endow the king"⁵

As in many of these ancient traditions, and for reasons that are not always crystal clear, human sacrifice tended to accompany many of these inaugurations. It was no different in Tahiti even up to Captain James Cook's visit to the island in the eighteenth century when he was actually shown the sacred girdle that had cost so many sacrificial victims in the crowning of the island's past imperial rulers. As it has been accentuated:

"Every part of the proceeding was marked by its absurdity or its wickedness, but the most affecting circumstance was the murderous cruelty attending even the preparation for its celebration. In order to render the gods propitious to the transmission of this power, a human victim was sacrificed when they commenced the *fatu raa*, or manufacture of this girdle."

Additional to that: "Sometimes a human victim was [also] offered for every fresh piece added to the girdle; and when it was finished, another man, called 'Sacrifice for the piu raa maro,' was slain; and the girdle was considered as consecrated by the blood of those victims."

And as if that was not enough: "On the morning of what might be called the coronation day, when the inaugurated chief bathed, prior to the commencement of the ceremonies, another human victim was required in the name of the gods."²

¹ *Ibid.*, 31.

² Idem, Annals, XII: 45.

³ Strabo, Geography, XI: 503.

⁴ W. Ellis, *Polynesian Researches*, Vol. III (London, 1859), p. 108.

⁵ Ibid.

⁶ Ibid.

¹ *Ibid.*, p. 109.

 $^{^2}$ Ibid.

THE BINDU

Eliade has interpreted the binding significance of deities in a religious-philosophical context. Such an approach does nothing by way of shedding light on the origin of such beliefs. The Magic of religion, the thread of life and fate, the bondage of slaves, and the likes of which he speaks, are nothing but the end result of a long line of philosophical reasoning that has for ages sought to explain the mysterious attributes and motives of the ancient deities.

The apparent binding influence of proto-Saturn's encirclement was so mesmerizing that, in Hindu tradition, the "world egg" became synonymous with the universal symbol of a circle with a dot in its center known as the bindu²—variant bindhu—which word probably derived from the Sanskrit bandh, or bandha, which means "to bind."

Among various other matters, this gave rise to a group of European deities whose very names reflect the binding influence for which they were originally known. Among them we come across the Phrygian Bendis, the Lithuanian Bentis, and the Illyrian Bindus.

The English word "bind" is itself derived from the Middle English binden, the Anglo Saxon bindan, Old High German bintan, and Middle High German binden, all of which mean "to tie" or "to bind." It is therefore not surprising that the English word "band," meaning "a fillet," "a cord," or "a chain," but also "a ring," is derived from the same Sanskrit root.⁴

More than that, however, the concept serves to illustrate humanity's obsession with symbolic representations. This was brought to the attention of the twenty-first century by studies involving the acquisition of language and the fixation on symbolic art that set *Homo sapiens* apart from previous *hominidae*. The depiction of objects is one thing, their symbolic representation is quite another. As Ian Tattersall exquisitely phrased it:

"It is no denigration at all of the Neanderthals and of other now extinct human species—whose attainments were entirely admirable in their own ways—to say that with the arrival on earth of symbol-centered, behaviorally modern *Homo sapiens*, an entirely new order of being had materialized on the scene."⁵

And yet, as he himself found reason to emphasize, "we cannot attribute the advent of modern cognitive capacities simply to the culmination of a slow trend in brain improvement over time." Rather than that, as he goes on, the already perfected human brain "equipped since who knows when with a neglected potential for symbolic thought," was somehow put to use. As he then suggests: "Instead of some anatomical innovation, perhaps we should be seeking some kind of cultural stimulus to our extraordinary cognition."

¹ M. Eliade, Images and Symbols (London, 1952), pp. 92-124.

² J. Purce, loc. cit.

³ N. Webster, Webster's Twentieth-Century Dictionary of the English Language (N.Y., 1939), p. 172.

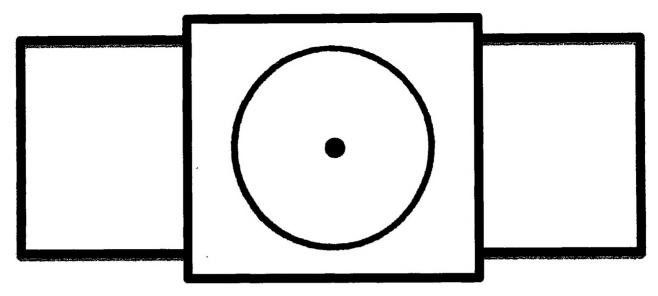
⁴ *Ibid.*, pp. 137, 172.

⁵ I. Tattersall, "How We Came To Be Human," Scientific American (December 2001), p. 58.

¹ Ibid.

² *Ibid.*, p. 59.

³ *Ibid.*, p. 60.



The symbolic bindu.

As far as our own study is concerned, the "cultural stimulus" that Tattersall was investigating was the very proto-Saturnian flare-up and its devastating, but still celestially glorious, aftermath that beset humanity only slightly later than he envisioned.

Enamoured as he was with solar halos, Donald Cyr was not far off the mark when he stated that:

"Some words and symbols seem to be as datable as potsherds. Consider the archaeological symbol of a circle with a dot in the center...Provisionally, the circle with dot can be assigned to dates between 6000 BC and 1400 BC. After that date, the symbol became obsolete. Before that date the symbol had not yet been invented."

Needless to say, according to our reconstruction of Earth's cosmic history, our benchmark figure of 10,000 years ago for proto-Saturn's eruption would place it 2,000 years earlier than Cyr's 6000 BC figure that translates into circa 8000 years ago. Yet, from a cosmic point of view, to say nothing of past inconsistencies in calendric computations, his date is not really that far off. We cannot, however, agree with his claim that the symbol became obsolete at the date he supplied since, especially in Hindiusm and Chinese calligraphy, the bindu remained in vogue up to the present—and Cyr very well knew it.

As far as those who claim to know the meaning of the dot in circle, one is surprised to learn the different connotations that have been attached to it by various connoisseurs, but among the most outstanding is its identification as a symbol of the Sun. 1 This became quite prominent among the Chinese who utilized a somewhat revolutionized version of the symbol in their intricate calligraphy as a representation of the Sun.² All of which is not surprising

¹ D. L. Cyr, King Arthur's Crystal Cave (Santa Barbara, California, 1997), p. 15.

¹ See, for instance, G. Mallery, Picture-Writing of the American Indians, Vol. Two (N. Y., 1893/1972), p. 675; E. Anati, Camonica Valley (N. Y., 1961), pp. 47, 162; E. Cochrane, Martian Metamorphosis (Ames, Iowa, 1997), pp. 195-196: *idem.*, *The Many Faces of Venus* (Ames, Iowa, 2001), pp. 37-38, 41. ² D. L. Cyr, *op. cit.*, p. 131; G. Mallery, *loc. cit*.

since, in effect, the bindu did represent the sun, except that it was not the present one, but its proto-Saturnian predecessor.

DATING ANOMALY

The bindu is found engraved on rock surfaces in various areas of the world. And even though a dot within a circle is fairly easy to draw, in many cases it was poorly executed. In some cases we find several rough attempts bunched together in a small space as if the person who inscribed them was trying to perfect his or her skill in portraying this symbolic representation. What does not escape our notice, however, is that this misinterpreted emblem remains one of the oldest symbols we find inscribed on rock throughout the world.¹

The antiquity of this symbol is not only evident from Neolithic sites in Europe and Asia, but, as it happens, even throughout islands in the Pacific as exemplified in Hawaii. We do, however, encounter a problem on this particular archipelago, and that concerns the very age—or, at least, the *given* age—of the petroglyphs in question.

Halley Cox informs his readers that the "amount of erosion of the marks" in one Hawaiian locality constitutes "proof of a long and continuous history" when compared with similar petroglyphs "in the surrounding area." We are not surprised, however, when he adds that it "has not been possible so far to establish more than [a] relative age for the petroglyphs." What is problematic is that, so far, the earliest of these marks have been assigned to the period just prior to European discovery. However, this does not seem to add up because, had that been the case, the chronological etching of these ancient symbols should not reflect that of the Neolithic samples we find emblazoned in other countries. And yet, despite Cox's predictable misinterpretation of the dot-in-circle, the symbol itself is considered to be the oldest among the islands' petroglyphs.

One thing that can be definitely stated is that, by the time of the islands' European discovery, the meaning inherent in the petroglyphs had long been lost. As far as we are concerned, this could not have transpired had these symbols really been engraved just slightly before Europeans set foot on Hawaii. To us, it is more than probable that the Hawaiians brought the symbol, together with others of its kind, from wherever it was that they had originated before settling in these Pacific islands. The meaning behind the petroglyphs they inscribed would by then have long been lost but, as in other parts of the world, tradition would have dictated their continuance.

GOD'S ENCIRCLING BAND

We have seen how proto-Saturn's seven encircling bands were described by the ancients to have been bunched into a threefold concentration, which pattern remains recognizable down into modern times among the resulting planet's set of rings. But this multifold perimeter was often simplified further through language into a *single* encirclement. Nor was this

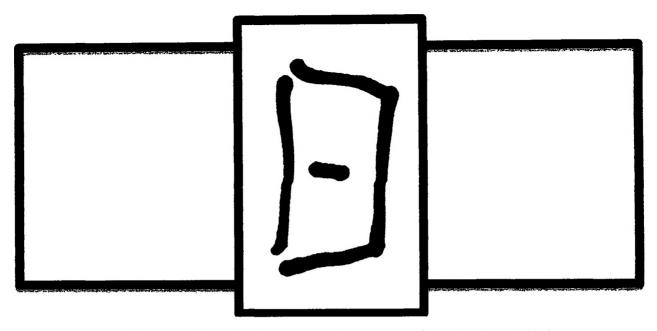
¹ E. Anati, op. cit., pp. 43, 47

² J. H. Cox (with E. Stasack), *Hawaiian Petroglyphs* (Honolulu, 1970), p. 53.

³ Ihid.

⁴ *Ibid.*, pp. 31, 32, 67.

⁵ *Ibid*, pp. 55, 61.



Chinese calligraphic character for "Sun" derived from the circular bindu.

simplification unique to ancient societies.

To start with, the modern recognition that Saturn's encirclement consisted of more than one ring took more than two hundred years of meticulous observations from those of Pierre Gassendi in the seventeenth century to the discovery of the faint inner ring by William Bond and Charles Tuttle in the nineteenth. But even after Saturn's multiplicity of rings became apparent, the planet's encirclement quite often continued to be referred to in the singular.

As we have already seen, the Egyptian Ra was praised as the "lord of the hidden circles," which circles—still in the plural—were named as those of Ament, one of the seventy five forms of the god. And yet the same encirclement of Ra was also spoken of in the singular as in the following laudatory text:

"Praise be to thee, O Ra...Governor of thy Circle—Praise be to thee, O Ra...the sender forth of light into his Circle—Praise be to thee, O Ra...thou art he who entereth into his Circle."

So similarly with Osiris whose "divine court" was called *shenit*, which designation also means "circle." As it was said of him:

¹ Also well known, but see A. F. O'D. Alexander, *The Planet Saturn: A History of Observation, Theory and Discovery* (N. Y., 1962/1980), pp. 87 ff., 176 ff.

² See, for instance, *ibid.*, pp. 133-138; L. Rudaux & G. de Vaucouleurs, *Larousse Encyclopedia of Astronomy* (1966), pp. 218, 221.

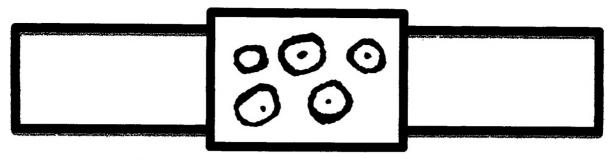
³ E. A. W. Budge, The Gods of the Egyptians, Vol. I (N. Y., 1904/1969), p. 339.

⁴ *Ibid.*, p. 340.

¹ Idem, An Egyptian Hieroglyphic Dictionary, Vol. I (N. Y., 1920/1978), p. 53.

² Idem, The Gods of the Egyptians, Vol. I (N. Y., 1904/1969), pp. 339-340.

³ R. K. G. Temple, *The Sirius Mystery* (N. Y., 1976), p. 182.



Petroglyphs indicating attempts at reproducing the bindu. La Pena Pintada, Jalisco, Mexico.

"Verily thou circlest in the circle of Ra...Verily thou art the great circler in the circle which is a mighty stream."

A hymn from the *Pyramid Texts* refers to Osiris as the Great Circle and the Great Surround that is described as "an enveloping ring" in "the Great Round of the Surrounding Ocean." Note also that the dead Pepi, who was assimilated to Osiris as all dead pharaohs used to be, was praised with the following words: "O Osiris Pepi, you are great and round like the ring that circles the *nbwt*."

The term *nbwt* has been interpreted by some as a reference to the Aegean Islands, but, as Jean Vercoutter has shown, the term more correctly refers to Earth's northern regions,⁴ which falls in neatly with proto-Saturn's celestial locality.

Ra was also called "the Coiled One who makes a circle." This coiling refers to the tail-biting *Ourobóros* we have already discussed in relation to proto-Saturn's spiraling debris. This is aptly borne out by the Babylonian *Enuma Elish* where it is stated that Tiamat's tail was tied to form what became known as the Great Bond. And, from a different perspective, we find that the spiraling celestial river that we have also identified as proto-Saturn's emission was believed by the same Babylonians to have formed Ea's abode—again in the singular.

"O thou River who didst create all things...Within thee Ea, the King of the Deep created his dwelling."²

The description of proto-Saturn's encircling rings in the singular was not restricted to Egypt or, for that matter, to earlier Babylonian tradition. A passage in the Biblical Book of

¹ E. A. W. Budge, Osiris and the Egyptian Resurrection, Vol. I (N. Y., 1911/1973), pp. 137-138.

² Ibid.; H. T. Rundle Clark, Myth and Symbol in Ancient Egypt (London, 1978), p. 117.

³ M. Lichtheim, Ancient Egyptian Literature, Vol. I (Los Angeles, 1975), p. 46.

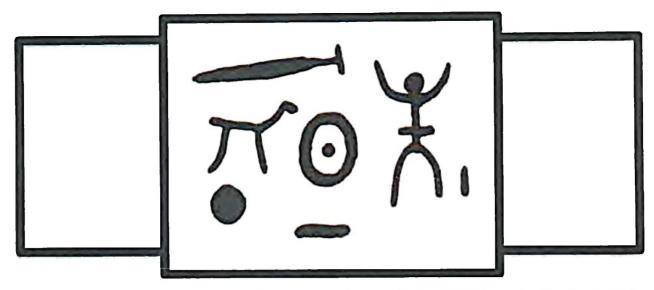
⁴ Ibid.

⁵ R. O. Faulkner, The Ancient Egyptian Coffin Texts, Vol. II (Oxford, 2004), p. 290.

⁶ Enuma Elish, V: 59-61.

¹ D. A. Mackenzie, Myths of Babylonia and Assyria (London, 1915), republished as Mythology of the Babylonian People (London, 1996), p. xxxiii.

² *Ibid.*, p. 29.



The bindu in association with other figures among the petroglyphs of Val Camonica, Lombardy, Italy.

Proverbs was originally made to read that Yahweh "prepared the heavens"—notice the plural—and "set a compass"—notice the singular—"upon the face of the deep." The Hebrew word translated as "compass," however, is choog, sometimes transcribed as khoog and even chuwg, which actually means "circle." For that reason, newer versions of the same passage more correctly describe Yahweh as having "established the heavens" through the drawing of "a circle" on the face of the deep.

So, similarly, according to the Slavonic Book of Enoch in which the Creator is made to say that he "made firm the heavenly circle," which circle was also alluded to as "the girdle which girt that house of fire," elsewhere translated as "the girdle which circled that house of fire."

Not surprisingly, as we have already seen, among numerous other items, proto-Saturn's ring system was envisioned as the god's residence. In fact, when it comes to Maltese and Arabic dialects, the very word for "house" and/or "residence" derives from the one meaning "circle." In Syrian, "house" is rendered dar, derived from dayri—Egyptian da'ira—meaning "circle." Likewise in the Maltese language where dar, as also dwejra—pronounced dweyrah—meaning "house," derives from dawra, which means "to turn," but also "circle" as in the Arabic duwwar that is still used to describe an encirclement of tents or residences.

It is therefore not surprising that the somewhat earlier Assyro-Babylonians thought of proto-Saturn's encirclement as a house or heavenly palace. In Ea's case, his abode was known as the Ezuab, which as been translated as meaning "house of Apsu."²

¹ Proverbs 8: 27 (King James version).

² J. Strong, op. cit., p. 37.

³ Proverbs 8: 27 (Revised Standard version).

⁴ Secrets of Enoch (also known as 2 Enoch or Slavonic Enoch), XXVIII: 1.

⁵ Book of Enoch (also known as I Enoch), LXXI: 6.

¹ I. Finkelstein, "Oval Settlements Among the Early Israelites," *Biblical Archaeology Review* (September/October 1988), pp. 42-43.

² F. Guirand, "Assyro-Babylonian Mythology," New Larousse Encyclopedia of Mythology (London, 1972), p. 56.



The hammering incision of Hawaiian petroglyphs. (Illustration by Y. S. Green.)



The encircled Ahura Mazda

Fiery rings, halos and coronas were, as they still are, also known as glories. Among the ancient Persians, such a halo, or glory, was known as a hvarna, sometimes transcribed hvarnah or khvarenah. Described as a "fiery nimbus," as also the "awful royal glory," it was the specific property of the Creator Ahura Mazda. In representations, this deity was shown girdled by a decorative circle.

The same hvarna, or halo of glory, was likewise said to have emblazoned Yima, whose body was described as having been "resplendent with light." As the Persian polymath al-Biruni stated, this resplendent light beamed forth from Yima "as though he shone like the sun." Like Ea and other Saturnian gods, Yima was also enshrined in a residence, called vara, that was said to have been sealed with a "golden ring."

In India, rather than having resided in the middle of a circular enclosure, the Vedic supreme god Narayana, who is also said to have floated on the celestial waters, embodied his own encirclement very much like the *ourobóros* of other races. Instead of biting his own tail, which he did not even possess, he achieved his circularity by arching his leg in order to hold his toe in his mouth.⁷

¹ C. Huart, "The Mythology of Persia," Asiatic Mythology (N. Y., 1972), p. 41.

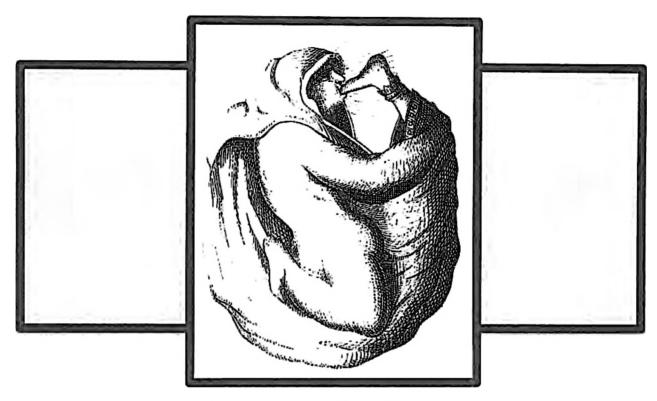
² J. W. Perry, Lord of the Four Quarters: Myths of the Royal Father (N.Y., 1970), p. 143.

⁴ J. Darmesteter, "The Zend Avesta," as cited in ibid., pp. 140-141.

⁵ J. W. Perry, *op. cit.*, p. 141.

⁶ Ibid.; R. Van Over, Sun Songs: Creation Myths Forn Around the World (N. Y., 1980), p. 337; see also H. Collitz, "König Yima und Saturn," in J. D. C. Pavry (Ed.), Oriental Satudies in Honour of Cursetji Erachji Pavry (Oxford, 1933), p. 94; J. de Menasce, "Persia: Cosmic Dualism," Larousse World Mythology (London, 1972), p. 200.

⁷ A. S. Murray, *Manual of Mythology* (N. Y., 1950), p. 389.



Narayana in the act of biting his own toe.

In Varuna's case, he is said to have resided in a "golden chamber" that was also "built in the waters."

Shiva, who in the end will turn out to have been the destructive manifestation of proto-Saturn, is not only believed to be surrounded by a "halo fringed with fire," but so has he been prevalently depicted down into present times.

For that matter, so is Brahma.

More to the point is the name Sangrahah that is bestowed on Shiva,³ since the name is derived from the Sanskrit san, meaning "fence" or "enclosure," and grahah, meaning "planet," which associates Shiva with a fenced, enclosed, or circled planet.

In Greece we come across an Orphic hymn to Kronos/Saturn in which the deity is lauded as holding "the indestructible bond."

Meanwhile, the encirclement of proto-Saturn by a fence is not limited to Hindu lore. The European Odin was also said to have surrounded Midgard, which we have seen identified as the proto-Saturnian celestial Earth, with such a fence.⁵

¹ Atharvaveda VII: 83: 1.

² P. Masson-Oursel & L. Morin, "Indian Mythology," New Laronsse Wncyclopedia of Mythology (London, 1972), p. 374.

³ V. S. Apte, *The Practical Sanskrit-English Dictionary* (Delhi, 1965), p. 948.

⁴ G. de Santillana H. von Dechend, *Hamlet's Mill: An Essay on Myth and the Frame of Time* (Boston, 1969), p. 133.

⁵ A. S. Murray, *op. cit.*, p. 358.

Across the ocean in Mexico, the controversial "self creating" Aztec deity Ometeotl was similarly described as "he who is at the centre" or "within the ring." And so, similarly, with the Maori of New Zealand whose name for the planet Saturn, Parearau, actually translates as "surrounding band."

Even in darkest Africa we come across the Efé pygmies of the Ituri forest who derive their name from their traditional ancestor, also named Efé, that was yet their name for the planet Saturn,³ that they well knew to be surrounded with rings⁴—yes, we note the plural.

The Efé, however, were not the only Africans who possessed this astronomical knowledge. The Dogon of Mali, whom we have mentioned before, can not only point to the planet Saturn, but actually know that it has "a permanent halo" around it that is "different from the one sometimes seen around the moon." When they are asked to draw a picture of Saturn, they depict an inner circle with an outer one around it.

Disregarding Robert Temple's proposition that the Dogon obtained their astronomical knowledge from alien astronauts who visited Earth in days gone by,⁶ the above is presented as additional evidence that proto-Saturn had primevally been in close enough proximity to Earth for its ring-like encirclement to be seen with unaided eyes.

¹ I. Nicholson, Mexican and Central American Mythology (London, 1967), p. 23.

² E. Best, The Astronomical Knowledge of the Maori (Wellington, New Zealand, 1922), pp. 35-36.

³ J-P. Hallet (with A. Pelle), *Pygmy Kitabu* (N. Y., 1973), pp. 385-386.

⁴ *Ibid.*, pp. 312, 386.

⁵ M. Griaule & G. Dieterlen, Le Renard Pale (Paris, 1965), p. 292...

⁶ R. K. G. Temple, op. cit., in toto.

Chapter 17

The Basis of Civilization

EMULATIVE SACREDNESS

ne mystic formula that has reverberated through the ages is the one that states quod superius sicut quod inferius, which is Latin for "as above so below." What this is meant to indicate is that what exists, or transpires, in heaven also exists, or transpires, here on Earth. This is declared quite explicitly in the Christian apocryphal book known as The Ascension of Isaiah. "And as it is above," it is there stated, "so is it also on the earth, for the likeness of that which is in the firmament is also on the earth."

As noted by Gwendolyn Leick, astral observation was not only "an intrinsic part of ancient civilizations," but "the notion of 'as above so below'," ended up forming "the basis of all divination."

Mircea Eliade was a little more specific when he wrote the following:

"The supremely sacred spaces—altars and sanctuaries—were, of course, constructed according to the traditional canons. But, in the last analysis this construction was based on a primeval revelation which disclosed the archetype of the sacred space *in illo tempore*, an archetype which was then indefinitely copied and copied again with the erection of every new altar, temple or sanctuary."

As we have seen, proto-Saturn's circular enclosure was visualized by ancient societies as the god's domain or residence. Thus, in order to imitate, and thus placate, the god above, in due course, a duplication of this enclosure was actually believed to be required here on Earth.

DIVINE PURPLE

An example of the above is demonstrated by the tabernacle, the collapsible portable shrine to Yahweh that Moses had the Israelites build while in the Wilderness of Sin. As it was and continues to be believed, the "separate parts" of this shrine did not only have a "symbolical significance," but that significance was in relation "to all that is above" since there had to be "something corresponding below."

Speaking in Yahweh's name, Moses demanded offerings from the people for the construction of this shrine. Among various other articles, he specified objects of "blue, purple,

¹ W. Barnstone, The Other Bible (N. Y., 1984), p. 525.

² G. Leick, A Dictionary of Ancient Near Eastern Mythology (London, 1991), p. 6.

³ M. Eliade, Patterns in Comparative Religion (London, 1996), pp. 371-372.

⁴ L. Ginzberg, *The Legends of the Jews*, Vol. III (Philadelphia, 1968), p. 165.

and scarlet," which colors were then woven into linen and remade into other items of the same colors.2

The tabernacle itself, akin to a roofless tent, was then enclosed within "curtains of fine twined linen, and blue, and purple, and scarlet." The hanging for the door of the tent was also "of blue, and purple, and scarlet." A purple cloth was spread over the altar. Even the ephod of the high priest was woven with "blue, and purple, and scarlet," as so, also, was the priest's girdle, his breastplate, and the pomegranates sewn on the hem of his robe. And so, similarly, with the trimmings incorporated in the building of Solomon's temple in Jerusalem.

Great debates have transpired among linguists concerning the actual color that is meant by the Hebrew word *tekhelet* that is believed to be God's chosen color. Some have opted for blue, others for purple. This debate mainly arose in an attempt to settle the actual color of the drapes adorning Solomon's temple and the robes worn by the Israelite high priests.¹¹

Personally, I could never quite understand why the meaning of this particular word had been knocked to-and-fro since the time of the Jewish philosopher Moshe ben Maimon, popularly known as Maimonides, in the mid-twelfth century, if not even before then. The Hebrew word tekhelet simply means "blue," and that is all there is to it. The Maltese word ikhal, derived from the same Semitic root, also means blue. In Hebrew, "purple" is rendered argâmân and, while linguists can continue to split hairs, that is the end of the story. Despite all that, however, there is no point in claiming that the drapes adorning Solomon's temple and the robes of the high priests were blue since, as we have just seen, while the Old Testament itself does specify blue, it does so together with scarlet and purple.

None of this should surprise those who have perused the prequel to the present work in which it is shown that the color purple—known in ancient times mainly as blue-black—was the color of the light that was emitted by proto-Saturn's flare up. ¹² In that respect, the enclosing of the Israelite tabernacle, and even Solomon's temple, in curtains of blue, purple, and scarlet does not fail to bring to mind the enclosure, and even throne, of the proto-Saturnian deity that was also described as having been purple. After all, other than the actual purple hue associated with the Israelite tabernacle and the paraphernalia that went with it, the other two desired tints, blue and scarlet, actually make up the same purple color. This was God's Divine Throne, the Purple Subtle Enclosure of the Chinese that is by them associated with their own Saturnian deity known as Shang-ti, as also the Fare-kura, or Purple House, of the Polynesians.

¹ Exodus 25: 4; 35: 6, 23.

² Ibid., 35: 25, 35; 38; 23; 39; 1, 3,

³ *Ibid.*, 26: 1, 31; 36: 8, 35, 37.

⁴ *Ibid.*, 26: 36; 27: 16; 38: 18.

⁵ Numbers 4: 13.

⁶ Exodus 28: 6; 39: 2.

¹ Ibid., 28: 8; 39: 5, 29.

⁸ Ibid., 28: 15; 39: 8.

⁹ Ibid., 28: 33; 39: 24.

¹⁰ II Chronicles 2: 7, 14; 3: 14.

¹¹ See, for instance, B. & J. Taubes Sterman, "The Great Tekhelet Debate—Blue or purple," Biblical Archaeology Review (September/October 2013), pp. 28, 73.

¹² D. Cardona, *Metamorphic Star* (Oregon, 2011), pp. 230-245.

ASTROGEOGRAPHY

Despite the fact that Eliade never believed that any of the events recorded in mytho-history ever took place in real time, or what he renders as *illo tempore*, he definitely understood what was being described. As he noted in one of his major works:

"The creation of the world is the exemplar for all constructions. Every new town, every new house that is built, imitates afresh, and in a sense repeats, the creation of the world."

In concurrence with Eliade, Ev Cochrane offered similar intuitions:

"Mythological themes formed the focal point of early culture and religious ritual, countless aspects of daily life being designed to commemorate these sacred events through imitation, mimicry, and simulation. Ancient cities and temples, to take but one example, were designed and oriented in accordance with the sacred original."²

Having come to the conclusion that the circular enclosure around proto-Saturn constituted the deity's residence, it matters not, as David Talbott had surmised, that this dwelling later evolved into different types of habitations among which was the temple, the city, and even the entire kingdom since, in the end, all of these habitats, together with others, were regarded as having been one and the same.³ As Talbott saw fit to clarify:

"The subject is the embryonic, circular 'cosmos' fashioned by the visible *creator*, who is Saturn. On earth men built imitative dwellings of varying scale and function. But mythically, each had its inspiration in the same enclosure. For all of mankind the band of the enclosed [Saturnian] sun became the model of the ideal dwelling, the divinely prescribed plan."

Eliade was confident in stating that: "The temple in particular—pre-eminently the sacred place—had a celestial prototype." But, as he also emphasized:

"Cities too have their divine prototypes...Not only does a model precede terrestrial architecture, but the model is also situated in an ideal (celestial) region of eternity."

And:

"Man constructs according to an archetype. Not only does his city or his temple have celestial models; the same is true of the entire region that he inhabits..."

¹ M. Eliade, op. cit., p. 379.

² E. Cochrane, "Towards a Science of Mythology: Velikovsky's Contribution," *AEON* III: 1 (November 1992), p. 122.

³ D. Talbott, "On Testing the Polar Configuration," AEON Vol. I. No. 2 (1988), p.105.

⁴ *Ibid*. (all emphases as given).

⁵ M. Eliade, The Myth of the Eternal Return (London, 1955), p. 7.

⁶ *Ibid*, pp. 7-8.

¹ *Ibid.*, p. 10.

"The city," according to David Leeming, "is humanity's stand against chaos." Or so, at least, it was remembered as having been "in the beginning." This was held true among those ancient societies where the taking possession of land was seen as "the transformation of chaos into cosmos," or of disorder into order.

MEGALITHIC REPLICATION

The terrestrial simulation of proto-Saturn's cosmic encirclement by ancient man did not take long for its conception to spread throughout habitable lands. Circular enclosures of wood and earth soon led to more elaborate replicas constructed with rocks and boulders that were enhanced further through the inclusion of tool-dressed stones.³ It is these structures, more than anything else, that marked the transition of ancient societies into the Neolithic era.

It is unfortunate that Peter Biehl considered these Neolithic megaliths as having been a "European phenomenon" when the remains of such structures have been discovered just about all over the world. And yet, despite the fact that these constructions number in the hundreds, only a few of them, as Biehl indicated, "have been uncovered or excavated fully" which is "one reason why the functions of the sites have been debated for decades."

One of the greatest problems that has frustrated investigators concerning the purpose for which these megalithic structures were erected stems from the variations in their form, which variations stretch from modest circles to elaborate superfluities that have been incorporated through succeeding ages. But this is no different than the development of later shrines that led to the intricacies we now find incorporated in modern temples, mosques, churches, and cathedrals. One must keep in mind that, in most areas, as Jill Abery noted, "the long departed builders of the megaliths have been superseded by peoples totally ignorant of earlier cultures and achievements, to whom the monstrous works of stone become the work of giants." Thus, to be sure, the oldest megalithic structure in the Maltese archipelago is still referred to as il-Gantija, the Giants' Work. Even Stonehenge, originally referred to as the Giant's Round, was once believed to have been built by superhuman beings.

ARCHAEOASTRONOMY

Although initiated by studies conducted at Stonehenge, which has since become the most renowned of these constructions, the most accepted theory concerning the motive behind megalithic constructions stems from their supposed alignments to astronomical bodies and

¹ D. A. Leeming, The World of Myth (N. Y., 1990), p. 319.

² M. Eliade, Patterns in Comparative Religion (London, 1996), p. 405.

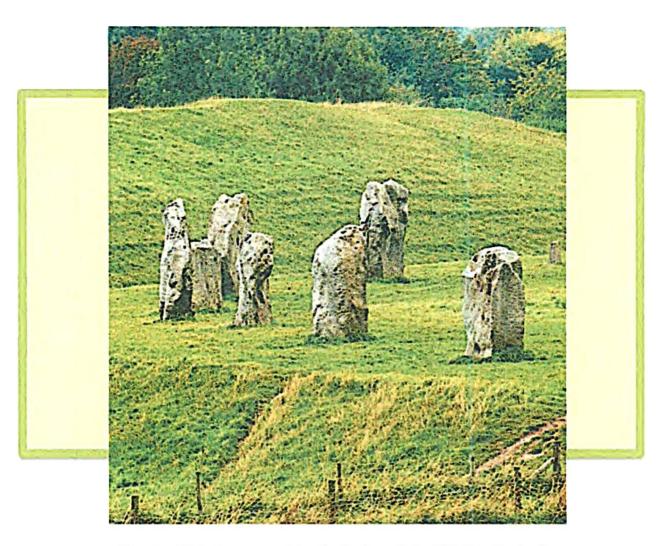
³ P. F. Biehl, "Enclosing Places: A Contextual Approach to Cult and Religion in Neolithic Central Europe," in D. A. Barrowclough & C. Malone (Eds.) Cult in Context: Reconsidering Ritual in Archaeology (Oxford, 2007), p. 175.

⁴ P. F. Biehl, "Enclosing Places: A Contextual Approach to Cult and Religion in Neolithic Central Europe," in D. A. Barrowclough & C. Malone (Eds.) Cult in Context: Reconsidering Ritual in Archaeology (Oxford, 2007), pp. 175-176.

⁵ Ibid.

⁶ J. Abery, "The Life and Death of Megaliths," Chronology and Catastrophism Workshop (1988: 2) p. 30.

⁷ P. James & N. Thorpe, Ancient Mysteries (N. Y., 2001), p. 169.



The megalithic stones comprising the Avebury circle, Wiltshire, England, dated to c. 2400 B.C.
(Photograph by the author.)

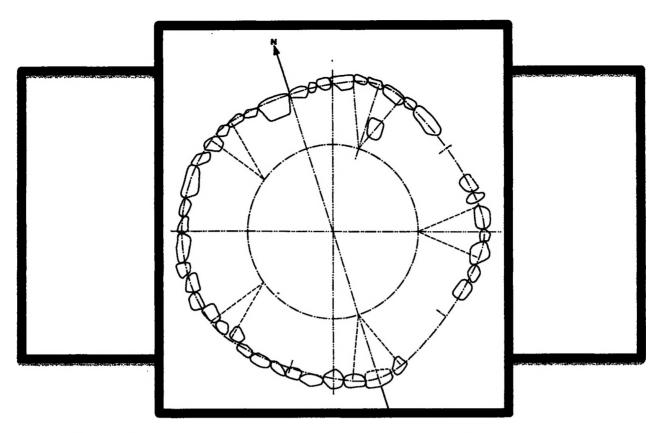
events at certain times of the year. In that respect, Stonehenge stands out as the embodiment of these examples, the most prominent alignment of which is believed to have marked the rising of the midsummer Sun, even though this has been criticized by quite a few authorities.

Megalithic astronomy eventually spread from Stonehenge to just about all other British stone and earthen enclosures from the Neolithic era. Most authorities would name the English astronomer Gerald Stanley Hawkins as the foremost among these archaeoastronomers. Apart from Stonehenge itself, however, Alexander Thom also made a name for himself once he dedicated his career to the investigation of these constructions in which he saw various alignments to the Sun, the Moon, and several stars and star groups. The deep passion he exhi-

D. Souden, Stonehenge Revealed (N. Y., 1997), p. 122.

² G. S. Hawkins, Stonehenge Decoded (N. Y., 1965); idem, Beyond Stonehenge (N. Y., 1973).

³ A. Thom, Megalithic Sites in Britain (Oxford, 1967), in toto; idem, Megalithic Lunar Observatories (Oxford, 1971), also in toto.



Plan of Moel ty Ucha at Merioneth, Wales, with some of Thom's proposed alignments—a good example of a megalithic stone circle, hundreds of which are known from Europe alone.

(Illustration after Alexander Thom.)

bited throughout his career spread to other enthusiasts among whom was Euan MacKie who used the results of his investigations as evidence against cosmic catastrophism, something that he claimed no one before him had yet done.

As indicated by this very author, however, as also by other investigators, the supposed alignments at the sites that MacKie studied are imprecise and quite ambiguous. And so, incidentally, with most other attempts to delineate alignments from many of these constructions through which lines are drawn in various directions across supposed outside markers to end up pointing at the rising points of Sun, Moon, and various stars.

There have been many other astronomical theories in relation to Stonehenge, as well as

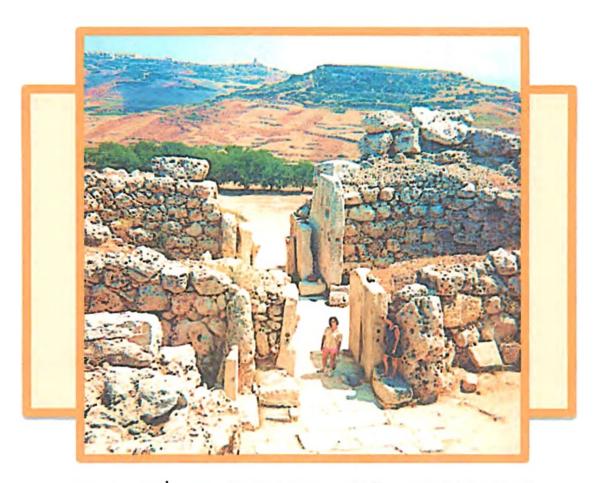
¹ E. W. MacKie, "Megalithic Astronomy and Catastrophism," *PENSÉE* (Winter 1974-1975), pp. 5 ff.

² *Ibid.*, p. 6

³ D. Cardona, "The Stones of Ballochroy," KRONOS IV:3 (Spring 1979), pp. 23 ff; idem, "The Cairns of Kintraw," in ibid., pp. 38 ff.: see also the ensuing debates, "Ballochroy, Kintraw, and MacKie," KRONOS V:3 (Spring 1980), pp. 80 ff.; J. S. Bibby & T. McCreery, "Kintraw and Bibby," KRONOS VIII:3 (Spring 1983), pp. 62 ff.; D. Cardona, "Kintraw, Bibby, and MacKie," in ibid., pp. 71 ff., idem, "Velikovsky, Kronos, and MacKie," in ibid, pp. 79-83.

⁴ T. McCreery, "The Kintraw Stone Platform," KRONOS V:3 (Spring 1980), pp. 71 ff.; idem, et al.,

[&]quot;Observations at Kintraw," KRONOS VIII:3 (Spring 1983), pp. 45 ff.



The ruins of il-Ġgantija—the Giants' Place—at Xaghra, on the Maltese island of Gozo, dated to 3600 B.C.

(Photograph by the author.)

other megalithic monuments, but all of them remain highly controversial.¹ The one that comes the closest to our own interpretation was proposed by Anthony Peratt who visualized Stonehenge and similar structures as ancient societies' portrayal of an intense auroral display that extended in the sky above them.²

While this is definitely not the place to investigate the wide reach of archaeoastronomy, there is no doubt that certain prehistoric monuments were erected with astronomical alignments, mostly solar, as their prime objective. Or, if not so originally raised, they must have been later adapted for such observations in order to ensure that Earth remained secure in its position. Having learned in later times that any apparent deviation of the Sun from its normal course throughout the year could portend disaster, they became diligent in keeping track of it. As we have already noted and will continue to note, however, that does not seem to have been the original reason behind the erections in question.

¹ D. Souden, op. cit., pp. 122-127; see also P. Clapham, "Report on Talks by Wal Thornhill and Anthony Peratt," Chronology & Catastrophism Workshop (2006:1), p. 11.

² Ibid.



Stonehenge, originally referred to as the Giant's Round, on the Salisbury Plain, Wiltshire, England, was also once believed to have been constructed by giants.

(Photograph by Jerzy Kociatkiewicz, courtesy of Creative Commons Attribution-Share Alike 2.0 Generic.)

THE FIRST TEMPLES

As is usual in such cases, there have been those who have seen the similarities of these megalithic constructions as having been due to diffusion rather than as having sprung up in isolation from one another in various regions of the world. What has to be kept in mind, however, as Victor Clube and Bill Napier noted, is that while the shape of these enclosures evolved through time, the earliest ones we know of were simply circular in form.¹

While Clube and Napier may have been chronologically thrown off track through the radiocarbon dating of artefacts found in the vicinity of these circles, they were still tempted to see cosmic catastrophe "as the culmination of a period during which the need to appease the sky god and/or predict its imminent arrival became ever more pressing."²

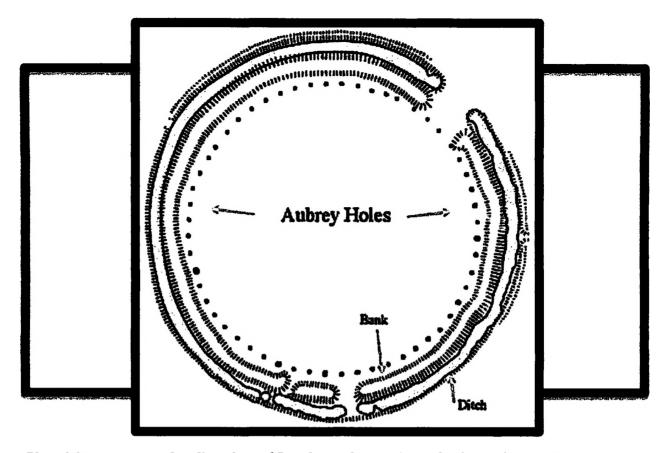
One other country in which megaliths abound is the Mediterranean island of Corsica, and here, again, one finds that the ones consisting of "low circles" seem to be the oldest.³ After all, even Stonehenge's intricate structures evolved out of a simpler circular ditch that was enclosed by banks of slightly raised earth.

That temples, in imitation of the original one, were believed to have been planned by God

¹ V. Clube & B. Napier, The Cosmic Serpent (London, 1982), p. 261.

² Ibid

³ J. Abery, "Saturn or the Sca Peoples?" Chronology and Catastrophism Workshop (1995: 2), p. 40.



Plan of the reconstructed earliest phase of Stonehenge that consisted of a simple circular ditch enclosed by banks of slightly raised earth.

himself was the belief of various ancient races including the Biblical Israelites.¹ As far back as ancient Mesopotamia, temples were considered as habitations where the gods actually dwelt and where "specially charged religious specialists ministered to their needs." Judging by what can be learned from ancient literature, temples were not originally centers for public worship, although priestly rituals were wont to attract lay persons to the vicinity of the early circular enclosures which they themselves would have helped the priestly caste to build.

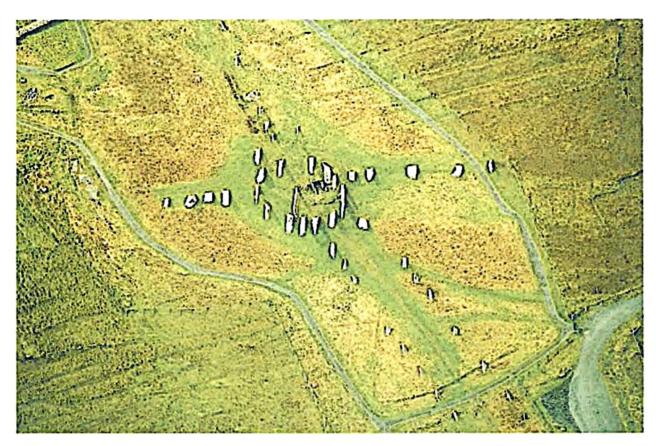
That these circles were constructed in imitation of proto-Saturn's encircled domicile has been noted by other aficionados, if not downright specialists. Eric Aitchison, for one, could not help but note the obvious similarity in one particular example. As he pointed out, "the stone configuration at Callanish," in Scotland's Outer Hebrides, is actually "an image of the Saturnian polar configuration" set on the ground. In fact, the association of the British circles with the proto-Saturnian deity can be verified through what the ancient Irish have left us in

¹ See here, for instance, V. Hurowitz, "Similar Temples—Same Architect?" Biblical Archaeology Review (July/Aigust 2011), pp. 9-10.

² S. Pollock, Ancient Mesopotamia: The Eden that Never Was (Cambridge, 1999), p. 178.

³ *Ibid.*, pp. 178. 192

⁴ J. E. Aitchison "Stone Circles and Other Random Thoughts," *Chronology & Catastrophism Review* (1997:1), p. 59.



Aerial view of the Callanish megalithic structure that incorporates proto-Saturn's recurrent axis mundi. (Photograph courtesy of Scotlands Places.)

their lore concerning these constructions the remains of which can still be found scattered in their country. According to them, as Emmett Sweeney tells us, these stone circles "were temples where the god Beal or Balor was worshipped and to this day stone circles in Ireland are named Beltanies (i.e. Bealtaine— 'Fire of Beal'). Moreover, timpeall, the very Irish word for "temple," is the same as the word for "circle." What then clinches the matter is that the god Balor with whom these stone circles have been associated has been identified by mythologists as having originally been related to both the Roman Janus and the Greek Kronos, both of whom were known by their very countrymen as the god of the planet Saturn. In that respect it can be said that Alfred de Grazia was way off base when he claimed that there "appear to have been no Saturnian monolithic civilizations," if by "civilizations" he meant any societal organizations brought together for administrative and/or religious purpose.

¹ E. J. Sweeney, "Merlin and the Round Temple," Chronology & Catastrophism Review (1999:1), p. 19.

² Ibid

³ W. R. S. Ralston, Russian Folk Tales (London, 1873), p. 72.

⁴ See here, for instance, Joannes Laurentius Lydus, *De Mensibus* 4:2, but also D. Cardona, *God Star* (Victoria, British Columbia, 2006), pp. 165 ff.

A. de Grazia, Chaos and Creation (Princeton, 1981), p. 187.

GÖBEKLI TEPE

There is a hill called Göbekli Tepe, which name means Potbelly Hill, so-called because of its rounded top, in southeastern Turkey. Sometime in the 1960s some broken slabs of limestone that were scattered around its top attracted authorities from the universities of Chicago and Istanbul. Interest, however, was dropped when it was assumed that the mound was simply an abandoned medieval cemetery.

It was not until 1994 that Klaus Schmidt, a German archaeologist who was surveying prehistoric sites in the region, decided to have a second look. What he discovered there during the following years of excavation is a series of concentric circular structures—double rings—that had been erected through different ages, each series of which seems to have eventually been intentionally buried by its original builders or their descendants. In fact, it has been concluded that it was the accumulating layers resulting from this repetitious burying that actually created the hilltop.

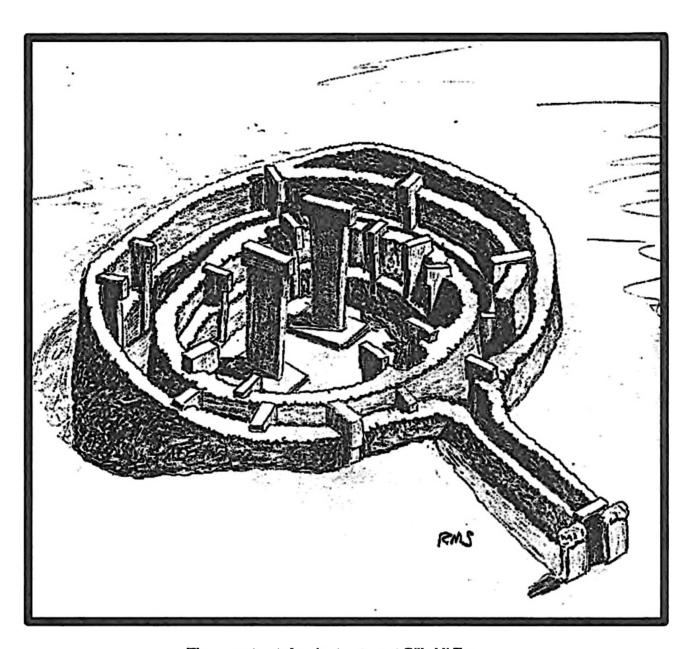
The unearthed structures are composed of megalithic T-shaped standing stones, or pillars, some of which stand up to 18 feet high, each weighing between 7 and 16 tons, that buttress lower walls constructed of much smaller stones in circular arrays. The T-shaped monoliths are carefully shaped and while some of them are blank, others are decorated with bas reliefs, and even carvings in the round, depicting a variety of deadly creatures including foxes, charging boars, ferocious lions, vultures, snakes, and even scorpions.

Ground-penetrating radar and geomagnetic surveys have between them detected from 16 to 20 more of these megalithic remains buried underground across 22 acres of the area. What has so far been brought to light amounts to less than five percent of this amazingly sprawling site. According to Schmidt, future archaeologists could continue digging at the site for another 50 years without barely scratching the surface.

Apart from these awe-inspiring megalithic assemblies that must have involved multitudes of workers for their erections, no evidence of permanent habitation—not a single sign of a settlement—has been discovered anywhere in the vicinity. Because of this, it was further concluded that the people responsible for the constructions were hunter-gatherers who had only come together specifically for the consecutive construction and burying of these mysterious megalithic concentricities. The required feeding of this populace while on the job is indicated by the thousands of splintered bones that lay sprawled around the area, but these were all the remnants of wild game—gazelles and aurochs—which again indicates that those involved had not yet domesticated animals or been involved in farming. There were also no signs of pottery, or the remains of cooking fires. Worse than that, there was no nearby source of water, with the nearest stream about three miles away.

Monumental constructions of this nature built away from communal habitation had to have had some sort of municipal motivation. And since an administrative station would have made no sense in isolation, the only logical incentive behind the buildings was concluded to have involved some sort of sanctity. Schmidt's first thoughts centered around the possibility of the site having served as a burial ground or the center of a death cult.¹ But in the end it was just

¹ A. Curry, "Gobekli Tepe: The World's First Temple?" smithsonianmag.com/history-archaeology/gobekli-tepe (November 2008), p. 3.



The reconstructed main structure at Göbekli Tepe. (Illustration by Richard M. Smith after Fernando G. Baptista.)

about unanimously settled that the structures had to have been religious shrines which elsewhere had already been known to have been built away from communal habitation.

How old is the site?

Because the stone tools used in the construction of the site that were found scattered around the area closely resembled others from nearby localities, which localities had already been radiocarbon-dated to about 9000 B.C., Schmidt and his co-workers concluded that Göbekli Tepe's structures had to be of the same age. Actual dating on the recovered bone

samples resulted in an age somewhere between 9230 ± 130 BP and 5775 ± 25 BP, in which BP stands for Before the Present. Other radiocarbon-dating on associated materials included the following:

Pedogenic (calcium) carbonates that formed on the lower reaches of the limestone pillars came out between 9290 \pm 70 BP and 6405 \pm 70 BP.²

Wall plaster consisting of loam and containing small amounts of charcoal that resulted in ages between 9984 ± 42 BP and 9250 ± 55 BP.³

Small traces of humic acids from a buried humus stratum yielded dates between 8880 ± 60 BP and 6515 ± 45 BP.⁴

Once these figures were calibrated and averaged out, a date of 9,600 years B.C., which translates into 11,600 yeas ago, was just about universally accepted as the probable age of the site in question. "This," Schmidt has claimed, "is the first human-built holy place—humanity's first cathedral on a hill."

DATING INCONGRUITIES

There are some indications that Göbekli Tepe's age might be slightly off the mark. For one thing, as earlier noted, charcoal, which at Göbekli Tepe is found in some wall plaster, tends to give considerably older radiocarbon-dates than the sites and/or items in which it is contained. That might explain why the dates from the animal bone samples at the site turned out to be systematically younger than the charcoal ones. But so was the date from humic acid that was collected from the dirt under one of the fallen megalithic pillars that resulted in the much younger calibrated age somewhere between 5559 and 5373 B.C. So, similarly, with one of the bone samples which yielded a calibrated date somewhere between 4702 and 4548 B.C.

Those last two dates were then assumed to lie far outside the expected age, and thus failing to meet the anticipated results. The anticipated date, however, was the one envisioned by the original and main excavator, Klaus Schmidt, who right off the bat had compared the

¹ A. Denaire, "Radiocarbon Dating of the Western European Neolothic: Comparison of the Dates on Bones and Dates on Charcoals," *Radiocarbon*, Vol. 51, No. 2 (2009), pp. 657-674; O. Dietrich, "Radiocarbon Dating the First Temples of Mankind: Comments on 14C-Dates from Göbekli Tepe," *Zeitschrift für Orient-Archäologie*, Vol. 4 (2011), pp. 12-25.

² K. Pustovoytov & H. Taubald, "Stable Carbon and Oxygen Isotope Composition of Pedogenic Carbonate at Göbekli Tepe (Southeastern Turkey) and its Potential for Reconstructing Late Quaternary Paleoenvironments in Upper Mesopotamia," *Neo-Lithics*, 2/03 (2003), pp. 25-32; K. Pustovoytov, "Soils and Soil Sediment at Göbekli Tepe, Southeastern Turkey: A Preliminary Report," *Geoarchaeology*, Vol. 21, No. 7 (2006), pp. 699-719; K. Pustovoytov et al., "Evidence for Holocene environmental changes in the Northern Fertile Crescent Provided by Pedogenic Carbonate Coatings," *Quaternary Research*, Vol. 67 (2007), pp. 315-327; K. Pustovoytov et al., "RadiocarbonDating of Thin Pedogenic Carbonate Laminae from Holocene Archaeological Sites," *The Holocene*, Vol. 17, No. 6 (September 2007), pp. 834-843.

³ O. Dietrich & K. Schmidt, "A Radiocarbon Date from the Wall Plaster of Enclosure D of Göbekli Tepe," *Neo-Lithics* 2/10 (2010), pp. 82-83.

⁴ O. Dietrich, loc. cit.

⁵ A. Curry, op. cit., p. 1.

⁶ See back to page 105.

⁷ A. Denaire, loc. cit.

¹ Ibid.; O. Dietrich, loc. cit.

tools found scattered at Göbekli Tepe with those that were discovered in nearby sites that had already been dated to 9000 B.C. As some have been asking, what are the chances that so many dates would end up validating Schmidt's speculated estimation?

Besides all that, one must also take the plus-or-minus (±) margin of error which is usually misunderstood by most laypersons. To give an example cited by David Barker:

"a C^{14} age expressed as '3,000 \pm 100 Years' leads readers to believe that the age is assured to be accurate within 100 years of 3,000; that the thing being dated almost certainly died some time between 2,900 and 3,100 years ago. What it really means is that the laboratory estimated the accuracy of the measurement of current levels of C^{14} in the specimen to within one standard deviation."

What this really amounts to is that, based on the measurement of current radiocarbon content, "there is only a 68.3% chance that the actual age is within the stated range."

That radiocarbon dating measurements do not produce precise date estimates has been known for quite some time.³ In fact, to be sure, other archaeologists, like Ian Hodder, have questioned the exactitude of the Göbekli Tepe dates.⁴ Even so, despite the imprecision of the method, including its oft-contradictory results, as I have often stated, radiocarbon-dating still remains the best method at our disposal. That said, I shall go one step further by claiming that an approximate date of 11,600 years for the site in question does not fall far from our posited proto-Saturnian flare-up that we have dated to have transpired some 10,000 years ago, the resulting encirclement of which prompted the construction of the various megalithic circles discussed above.

GÖBLEKIAN HYPOTHESES

It would be rather futile for our purpose to go into some of the superfluous theories that have been proposed for the Göbekli Tepe constructions in any detail. As with most of these megalithic structures, it was to be expected that some would end up envisioning alignments pointing to various stars and star groups. Other concepts, however, are even more bizarre, especially among those who have envisioned the site as the greatest vindication of Biblical history. Among these peculiar concepts, one comes across the identification of the site as the location in which our primordial ancestors settled once they were evicted from the Biblical garden of Eden, if not as the very locality of Eden itself. Others have identified Göbekli

¹ D. Barker, "Radiocarbon Dating and Chronology," Chronology & Catastrophism Review (2013), pp. 43-44.

² *Ibid.*, p. 44.

³ T. C. Aitchison & W. M. Scott, "A Review of Calibrating," in R. G. Ward (ed.), *Applications of Tree-Ring Studies* (Oxford, 1987), p. 188.

⁴ P. Symmes, "History in the Remaking," newsweek.com/id/233844 (February 19, 2010), p. 3.

¹ See for instance, I. B. Dingir, "Gobekli Tepe: Discovering a Labyrinth at the World's Oldest Temple to the Stars," academisa.edu (April 23, 2010); A. Collins, "Göbekli Tepe: The Cosmic Connection," atlantisrisingmagazine.com (July 1, 2013).

² A. Collins, Göbekli Tepe: Genesis of the Gods: The Temple of the Watchers and the Discovery of Eden (Rochester, 2014).

Tepe's location as the place where Noah's family settled following the Biblical deluge; with at least one of the constructions as the altar that Noah built to Yahweh; and the material said to have been used to bury the constructions as the actual sediment deposited by the Deluge.¹

Because the single largest carving on one of the shaped monoliths depicts a vulture posed over a headless human, Schmidt has seen the site as a possible place where human corpses were exposed for the consumption of these birds.² Had that been the case, however, human bones should have littered the site, but, truth be told, very few such bones have been recovered,³ and these could have belonged to accidental fatalities during construction.

Although for different, but somewhat related, reasons, Hodder has not only dubbed the site as "unbelievably big and amazing," but to have actually risen "at a ridiculously early date." But if we were to reduce Göbekli Tepe's calibrated age of 11,600 years to our benchmark figure of 10,000 years ago for proto-Saturn's flare-up, it might actually fit in. In that respect, Göbekli Tepe's megalithic rings could have been erected in simulation of proto-Saturn's resultant encirclement. But why would they have been repetitively added to and buried time and again?

As with Stonehenge, what has transpired with a few other megalithic structures down through the ages is their demolition and following reconstructions that either added to or changed the original configurations. It was no different with Göbekli Tepe which went through a succession of additional rings set within the earlier ones, even up to three concentricities, only to be entirely buried and reconstructed anew time and again.⁵ As Charles Mann reported:

"As time went by, the pillars became smaller, simpler, and were mounted with less and less care. Finally the effort seems to have petered out altogether by 8200 B.C. Göbekli Tepe was all fall and no rise." 6

As Schmidt himself suggested, new gods—or, in our case, different configurations—require the elimination of older ones.¹

Setting aside the date of 8200 B.C. for the petering out of Göbekli Tepe, which date suffers from the same erroneous radiocarbon-dating technique that affects its entire usage, we can actually detect the builders' attempts to keep track of proto-Saturn's spiraling debris and its slow evolution into a series of concentric circles that, as we have seen, eventually ended up in three main consolidations, and thus Göbekli Tepe's three concentric rings.

¹ H. Travis, et al., "How Does Göbekli Tepe Fit With Biblical History?" creation.com (July 26, 2011); M. Nartoomid, "Noah's Ark and Gobekli Tepe, crystallinematrix.wordpress.com January 11, 2012); and various other similar websites.

² P. Symmes, op. cit., p. 2.

 $^{^3}$ Ibid.

⁴ *Ibid.*, p. 1.

⁵ C. C. Mann, "The Birth of Religion," National Geographic (June 2011), p. 48.

⁶ Ibid.

¹ P. Symmes, op. cit., p. 3.

THE GENESIS OF GENESIS

Having already delineated in some detail what has been recorded by modern man concerning the origin of religion in a previous volume of this series, there still remains quite a bit to be told concerning mankind's unshakable belief in divinity and all that it involves. In a way, despite his heterodox ideas, the Italian philosopher, Giambattista Vico—1668-1744—came close to the mark when he claimed that the concept of God was among humanity's first ideas.²

Despite the hair-splitting so beloved of specialists in this particular field—as also in many others—that very idea can be said to have been the genesis of religion. Even so, as these very specialists have been asking, what, exactly, does "religion" mean?

The very word "religion," so Richard Heinberg tells us, comes from a Latin root that signifies "to tie" or "bind," which to us, at this point, needs no further clarification. And yet, it might seem strange to some, especially Biblicists, that there is no word in Hebrew for "religion."

"Little or no consensus exists as to the definition of ritual, religion, and cult, nor is there much agreement on appropriate theoretical constructs useful in their study no matter how they are defined." Or so, at least, according to Mark Aldenderfer who also claims that "because religion sits at the nexus of social, cognitive, and behavioral domains, no single theoretical perspective can nor should hope to capture what religion and its material representation 'mean'."

To an extent, David Barrowclough agrees, especially when he, too, stresses the fact that the "definition of religion has been the subject of much debate." On the other hand, Barrowclough himself supplies us with one of the best definitions that I have ever come across when he tells us that "religion can be understood as the formalised recognition of some higher, unseen, divine power as having control over human destiny, and as a consequence is worthy of reverence, obedience and organised worship." Except that, as we have seen, mankind's original god was anything but unseen.

There was a time not that long ago when it was believed that hominids emerged as fully human with artistic and religious awareness some 40,000 years ago.² Sigmund Freud saw the guilt generated by the slaying of despotic fathers by their power-hungry sons during this early

¹ D. Cardona, Metamorphic Star (Oregon, 2011), pp. 22 ff.

² F. E. Manuel, The Eighteenth Century Confronts the Gods (Cambridge, 1959), p. 155.

³ R. Heinberg, Memories and Visions of Paradise (Los Angeles, 1989), p. 247.

⁴ Elie Wiesel during an interview conducted by Hershel Shanks, "Contrasting Insights of Biblical Giants," Biblical Archaeology Review (July/August 2004), p. 32.

⁵ M. Aldenderfer, "Bringing Down the Mountain: Standing Stones on the Northern and Central Tibetan Plateau 500 BCE—500CE," in D. A. Barrowclough & C. Malone (eds.), Cult in Context: Reconsidering Ritual in Archaeology (Oxford, 2007), p. 244.

⁶ D. A. Barrowclough, "Putting Cult in Context: Ritual, Religion and Cult in Temple Period Malts," in D. A. Barrowclough & C. Malone (eds.), op. cit., p. 45.

¹ Ibid.

² R. Rudgley, The Lost Civilizations of the Stone Age (N. Y., 1999), p. 11.

time as having instigated "the beginnings of religion, morals, society, and art." With the discovery of Göbekli Tepe and other cultures of similar antiquity, all of that changed. What was then beginning to come to light was that the foundation of religion, as well as other innovations, were due to the eventual gatherings of what had once been hunter-gatherers into settled communities that were brought together specifically for ritual purposes. "Through the later Pleistocene and into the early Holocene," so Hodder distinctly tells us, "we have seen increased sedentism, and increased investment in ceremony."

Patrick McCafferty also tells us that, when it comes to prehistory, "people seem to have devoted much more effort to building structures for ritual, cult and religion than for domestic use." To which he then adds:

"One might hope that mythology, with stories that echo prehistoric society, would help us understand the nature of ancient gods. Sometimes it is easy to connect these gods with particular attributes...but all too often, they defy such simple associations, and their actions in myth are impossible to relate to the physical world..."

And yet, as he himself stated: "Astronomy may hold the key to all of these issues—and by explaining the actions of the gods in the myths, may even help to increase our understanding of ancient structures and enigmatic rituals."

McCafferty sees comets as having been what he terms "the misidentified gods" of mythology, even though, as we have been noting throughout the sequential volumes of this series, in many instances the deities that are discussed in the mytho-historical record were identified with the planets by those who venerated them.

FAR FROM UNIQUE

It might be a bit of an exaggeration to say, as it has been said, that the constructions at Göbekli Tepe are "the oldest monumental artworks in the world," and that they "may be the very first thing human beings ever built." What has been discovered there is too sophisticated not to have been preceded by transitional models that would eventually have developed into Göbekli Tepe's complex structures. After all, despite the fact that Göbekli Tepe has been garnering all the news in the archaeological field, it is not unique—far from it.

Karahan Tepe, first discovered in 1997, three years after Schmidt began his excavation of Göbekli Tepe, was surveyed early in the twenty-first century. This site, as well as others we shall be mentioning, is not only situated in the same general area as Göbekli Tepe, but is in many respects quite similar to it. Besides the similarity of the tools discovered at both these

¹ R. H. Armstrong, in relation to Freud's *Totem and Taboo*, "Freud: Schliemann of the Mind," *Archaeology Odyssey* (March/April, 2001), pp. 24-25.

² I. Hodder, The Leopard"s Tale: Revealing the Mysteries of Çatalhöyük (London, 2006), pp. 235-236.

³ Ibid., p. 249.

⁴ P. McCafferty,"Cult in Cometary Context," in D. A. Barrowclough & C. Malone (eds.), op. cit., p. 229. ⁵ Ibid.

⁶ Ibid.

⁷ *Ibid.*, p. 231 ff.

¹ P. Symmes, op. cit., p. 1.

sites, Karahan Tepe also displays a number of T-shaped pillars, many of which are still in situ even though most of them were still buried, with only their tops above the surface, at the time of this writing. Walls between the pillars have also been detected.¹

Like those of Göbekli Tepe, some of these pillars are carved with animal reliefs, but, unlike those of Göbekli Tepe, other than snakes, most of these, including a bird and parts of a gazelle and even a rabbit, are anything but ferocious. An anthropomorphic statue exhibiting a phallus, with features similar to ones discovered at Göbekli Tepe, has also come to light.²

As the Turkish archaeologist Bahattin Çelik, whose fame has unfortunately been eclipsed by that of Klaus Schmidt, has indicated: "In the light of all the finds, it can be stated that Karahan Tepe seems to be contemporary with Göbekli Tepe's upper layers," while the presence, as well as absence, of certain tools associated with both sites has led to the dating of Karahan Tpe "to the Early Pre-Pottery Neolithic B period." However, as Çelik himself has stated, "it may be possible to date this settlement back to phase A of the Pre-Pottery Neolithic after future excavations at Karahan Tepe."

Another site in the same geographical district that was first discovered in 2000 is Hamzan Tepe located near the geological fault-line that cuts through the region known as Fatik Dağlari. Consisting of two separate phases, one has been dated to the Lower Paleolithic era, with the other to the Pre-Pottery Neolithic period.

Architectural remains that have been discovered at this site at the time of this writing include a section of a wall "constructed of several stone layers" abutted by what is now becoming the telltale mark of these early Turkish sites, a T-shaped pillar. What has also come to light were two buildings that have been claimed to be "the first round planned civic architecture elements" in the region. But, in view of what might yet be discovered, even that may be something of an idealistic remark. As in the case of Göbekli Tepe, there is no water source anywhere in the vicinity.

Together with the other regional discoveries discussed above, "Hamzan Tepe was used as a temporary open air site in the Lower Paleolithic and as a minor settlement in the Pre-Pottery Neolithic." And, as with Karahan Tepe, Çelik believes that "prospective excavations" in the Hamzan Tepe areas yet to be conducted "could date this settlement to Phase A of the Pre-Pottery Neolithic."

One other site we shall mention here is Sefer Tepe that was discovered during an inventory project that took place between 2000 and 2003. To once again quote Çelik:

¹ B. Çelik, "Karahan Tepe: A New Culltural Centre in the Urfa Area in Turkey," *Documenta Praehistorica*, Vol. XXXVIII (2011), pp. 241-243.

² Ibid.

³ *Ibid.*, p. 246

⁴ *Ibid.*, p. 247 (emphasis added).

⁵ Idem, "A New Early Neolithic Settlement in Southeaster Turkey: Hamzan Tepe," Neo-Lithics, 2.04, pp. 3-4.

⁶ Idem, "Hamzan Tepe in the Light of New Finds," Documenta Praehistorica, Vol. XXXVII (2010), pp. 257, 259.

⁷ *Ibid.*, p. 257.

¹ Ibid.

² *Ibid.*, p. 267.

"The most noteworthy feature of [the] Sefer Tepe settlement are the 16 intact T-shaped pillars [found] in situ. All of these pillars are of limestone and stand either side by side or opposite from each other...they exhibit close parallelism with the in situ and intact pillars on the surface of Karahan Tepe and the Layer II architecture of Göbekli Tepe."

And:

"Due to the fact that Sefer Tepe displays parallelism with the Layer II architecture of Göbekli Tepe, it is plausible to date it to the Early or Middle Pre-Pottery Neolithic B Period."²

Moreover:

"Sefer Tepe is a new member of the settlements characterised with an architectural tradition featuring T-shaped pillars that were discovered in the last twenty years. It is highly likely that future comprehensive and systematic surveys in the region will bring to light new settlements of this tradition."

T-shaped pillars have also been discovered at Nevali Çori and even elsewhere,⁴ with probably more to come.

To wrap up this section of our documentation let it be noted that, as we have seen, Çelik has a habit of referring to these sites as "settlements," which word has a tendency to be understood as "permanent habitations." But, as he has clarified, the shared characteristics of the constructions in question accentuates the very "temple worship tradition" that is evidenced at Göbekli Tepe.⁵

FROM CULT TO CULTURE

One other claim made by Vico, preceding the similar one adopted by Freud almost two hundred years later, is that "religion and civilization were born together." Among other matters, however, the discovery of the Göbekli Tepe structures have convinced most archaeologists and historians that it was religion that was the very genesis of civilization. In other words, religion was born before civilization asserted itself. In fact, Göbekli Tepe has entirely upset what had previously been ascertained concerning mankind's prehistoric past. As Andrew Curry noted:

"Scholars have long believed that only after people learned to farm and live in settled communities did they have the time, organization and resources to construct temples and support complicated social structures. But Schmidt argues it was the other way around: the extensive, coordinated effort to build the monoliths [of Göbekli Tepe, to

¹ Idem, "A New Pre-Pottery Neolithic Site in Southeastern Turkey: Sefer Tepe," Neo-Lithics, 1/06, p. 23.

² *Ibid.*, p. 24.

³ Ibid.

⁴ Idem, "A New Early Neolithic Settlement in Southeaster Turkey: Hamzan Tepe," Neo-Lithics, 2.04, p. 3.

⁵ *Ibid.*, p. 4.

⁶ F. E. Manuel, loc. cit.

say nothing of the additional sites discussed above] literally laid the groundwork for the development of complex societies."

Although the building of these megalithic structures occurred during the time when most of mankind, still scarred from the cataclysms that followed in the wake of proto-Saturn's blinding outburst, had best progressed to hunter-gathering societies, the construction of the complexes under consideration could not have been carried out by such "ragged bands." In order to construct a series of nested rings linked by eighteen-foot-tall pillars, some of which are carved with representations of various animals, would have required a multitude of seasoned workers, all needing to be fed and sheltered.

According to Schmidt: "It was the urge to worship that brought mankind together in the very first urban conglomerations." Even if some of those who later visited these ancient temples did not do so in order to immerse themselves in direct worship, such centers would still have attracted them to come and watch whatever proceedings were being enacted within their confines. It is this type of gathering places, it is now believed, that gave rise to civilization. As quite a few archaeologists are now maintaining, religion now appears to be "less a product of culture than a cause of it." It thus becomes clear, as others have noted, that mankind progressed from its hunter-gathering past "with a ready vocabulary of spiritual imagery." And, given mankind's proto-Saturnian experience, that progression would have been most understandable. Even those who were completely unaware of the proto-Saturnian events have realized that "organized religion arose" in answer to "a common vision of a celestial order."

THE RISE TO POWER

As documented in the prequel to the present volume, those whose trancelike ability, or even quackery, impressed those who lacked the art, soon found themselves in the enviable position of dream interpreters, from which they progressed to higher avenues of wizardry. Thus was born the art of shamanism. And although it was shamanism that probably led to priesthood, the two evolved in slightly different ways and continued to exhibit different traits down through the years. Yorke Rowan and David Ilan expressed it best when they wrote:

"A shaman may be described as a religious specialist whose powers focus on curing, prophesy and sorcery. Shamans are often held to exert control over weather, animals and enemies...Priests, in contrast, more commonly inherit their power or derive it from the codified, ritual knowledge necessary to conduct public rites for the benefit of a

¹ A. Curry, op. cit., p. 2.

² Ibid.

³ Ibid.

⁴ P. Symmes, loc. cit.

⁵ *Ibid.*, p. 2.

⁶ Ibid.

⁷ C. C. Mann, op. cit., p. 57.

⁸ D. Cardona, op. cit., p. 24.

community or village. These rites may be calendrical or performed at critical junctures in ecological cycles."

"This variety" they then go on, "suggests a diversity of coexisting ritual specialists, shamans and priests, operating within the framework of a common religious worldview."

In time, despite the diversity between them, both shamanism and priesthood gave rise to an elite congregation among whom certain members rose in authoritarian positions that even led to chiefdoms.

To be sure, Rowan and Ilan do not quite agree, especially since they have also detected a certain amount of ritual diversity even among those of otherwise similar beliefs, especially during the Chalcolithic period—c. 5,000 B.C.—in the southern Levant. This diversity, which is different from the one separating shamans from priests, led them to believe that it is "unlikely that permanent, formalized ritual authorities" could have "dominated the religious and local landscape" of the time.² "Not all religious phenomena," so they maintain, "serve to legitimise elite authority." And yet, they then go on with:

"By the same token, the existence of some centralized, formalized ritual activity is likely. Chiefly power and rule is often legitimised through access to the sacred and the divine."

They do, however, honestly admit that the uncertainty of chronology "lacks the resolution to warrant firm conclusions."

One thing that Mann definitely got right is that those who rose to power—from shamans to kings and later emperors—"were seen as having a special connection with the gods."

MODERNITY'S ENTRENCHED HERITAGE

As we all know, modernity has not succeeded in ridding humanity of its continuous reliance on religion. Not only that, but adherents of any one religion remain adamant that theirs, and only theirs, reflects the true word of God. Other religions, most of them will tell you, are definitely based, or at least contain, a fair amount of controversial, if not downright profane, material, but not theirs.

What has to be taken into consideration, however, is that all religions have changed through their evolutionary enhancement through the ages. And yet, as Eugene Goblet d'Alviella noted back in the nineteenth century, religions continue to preserve, both in their rites and symbolic representations, various aspects that survived from former ones.¹

¹ Y. M. Rowan & D. Ilan, "The Meaning of Ritual Diversity in the Chalcolithic of the Southern Levant," in D. A. Barrowclough & C. Malone, op. cit., p. 251.

² *Ibid.*, p. 254.

³ Ibid.

⁴ Ibid.

⁵ Ibid.

⁶ C. C. Mann, loc. cit.

¹ E. G. d'Alviella, *The Migration of Symbols* (1894), republished as *Symbols: Their Migration and Universality* (Mineola, N. Y., 2000), p. 266.

Personally, I will actually go one step further in that all religions continue to preserve disconnected, and even misconstrued, aspects of what transpired in Earth's cosmic realm from approximately 10,000 to 5,000 years ago. And let us not, for one moment, think that this only applies to what some of us may consider primitive mysticism. All religions remain tainted with whatever transpired in the past, to say nothing of the ancient rituals that were created for the celebration of those events. Once again, we could devote entire volumes to this subject, but, in order to keep it short, despite its universal importance, let me merely cite Rachel Shea:

"A primal heart still beats in Europe. Deep beneath the gloss of cell phone sophistication lie rituals that hark back to harvests and solstices and fear of the winter dark...The celebrations correspond to Christian holidays, but the rituals themselves often predate Christianity."

And while Shea found it reasonable to state that the roots of these modern European rituals "are difficult to trace," it should not be all that difficult to those who have acclimatized themselves to our dissertation.

Religion has even tainted science with ridiculous concepts such as the undetectable God gene and what some have been referring to as God experiments.³ More recently, David Lewis-Williams and David Pearce have been proposing that the similar, when not identical, belief systems that are encountered right across the world actually stem from the electro-chemical functioning of the human brain we all possess.⁴ In other words, according to this proposed scientific explanation, what we all ended up believing was bound to happen, as it did actually happen, in near-identical ways to all of us.

When it comes to politics, it is no secret that many American states have had their ups and downs concerning the teaching of Darwinian evolution and/or the inclusion of Biblical fundamentalism in educational curricula, but recently it has gone deeper than that. This transpired when an eight-year-old student named Olivia McConnell wrote to the governor of her South Carolina state to add the Columbian mammoth fossil among its state official symbols. The bill that McConnell's letter inspired became what has been termed "the subject of considerable angst at the legislature in the state capital of Columbia." Kevin Bryant, an objecting self-described born-again Christian senator, is on record for attaching "three verses from Genesis to the act, outlining God's creation of all living creatures." The amendment was then "spiked" as out of order for "its introduction of divinity" by those who did not agree with its content. Senator Bryant, however, took another crack at it by specifying that the

¹ R. A. Shea, "Europe's Wild Men," National Geographic (April 2013), p. 102.

² Ihid

³ D. H. Hamer, The God Gene: How Faith is Hardwired Into Our Genes (N. Y., 2004), in toto; J. Horgan, "The God Experiments," Discover (December 2006), p. 52.

⁴ D. Lewis-Williams & D. Pearce, Inside the Neolithic Mind: Consciousness, Cosmos and the Realm of the Gods (London, 2005), in toto; C. Jones, Temples of Stone: Exploring the Megalithic Tombs of Ireland (Cork, Ireland, 2007), pp. 153-155, 157.

¹ J. Gatehouse, "The Dumbing Down of America," Maclean's Magazine (May 26, 2014), p. 19.

 $^{^2}$ Ibid.

Columbian mammoth "was created on the sixth day with the other beasts of the field." And, strangely enough, that version actually passed. Fair enough, there were "squabbles over the new language" and it, too, was eventually removed. But that remains besides the point since what is being stressed here is the attempt by a senator to introduce religion in state legislation.

The Danish philosopher Søren Kierkegaard expressed it best when he stated that "faith begins precisely where thinking leaves off."

¹ Ibid.

² Ihid

³ S. Kierkegaard, Fear and Trembling (Harmondsworth, 1985), p. 82.

Chapter 18

Culture and Agriculture

THE GOD OF HUSBANDRY

text from Sumer, the writing of which civilization is the earliest we presently have at our disposal, tells us that there was a god associated with grain and that he is to be found in the locality in which the "the creation of the gods" took place. Additional to that, according to another Sumerian text, it was the Saturnian god Ninurta who originally "scattered seed far and wide." As this tradition then goes on, upon their developing, "the plants with one accord" named Ninurta as their king." As Gavin White reports: "The earliest references in Sumerian literature show Ninurta to be an agricultural god who brings rain and flood to the fields."

In Babylon, the god Enlil, whose proto-Saturnian identity has been presented in the prequel to this volume,⁵ was considered "the chief god of the farmers" even though "he soon rose to be the supreme god of the whole Babylonian pantheon."

As far as the ancient Egyptians were concerned, the deity Amen-Ra was not merely the god of farming, but, very much like the Sumerian Ninurta, he came to be known as the very producer of grain, which grain, as in Sumer, was also associated with Creation. Thus in a hymn from the twentieth, or twenty-first, dynasty, we find the deity lauded as the "first born god," the "[e]stablisher of all creation," and "the producer of the staff of life," where the staff of life is interpreted as "wheat and barley."

Another Egyptian deity who was generally thought of as the god of agriculture was Osiris, especially under his name of Osiris-Neper.⁸

In Greece, it was Triptolemos who was thought to have traveled in his snake-driven, or dragon-yoked, car while teaching mankind how to sow, extending the art of agriculture "to most distant lands."

As far as the somewhat later Romans were concerned, the inventor of agriculture was the god Saturnus.²

¹ M. Eliade, The Myth of the Eternal Return (London, 1955), p. 6.

² S. H. Langdon, Semitic Mythology, Vol. V of C. J. A. MacCulloch (ed.), The Mythology of All Races (N. Y., 1931/1964), p. 119.

³ Ibid.

⁴ G. White, Babylonian Star-Lore: An Illustrated Guide to the Star-Lore and Constellations of Ancient Babylonia (London, 2008), p. 55.

⁵ D. Cardona, Metamorphic Star (Oregon, 2011), pp. 66-68, 308.

⁶ G. White, op. cit., pp. 163-164.

⁷ E. A. W. Budge, The Gods of the Egyptians, Vol. II (N. Y., 1904/1969), p. 7.

⁸ Idem. Osiris and the Egyptian Resurrection, Vol. I (N. Y., 1911/1973), p. 58.

¹ A. S. Murray, Manual of Mythology (N. Y., 1950), p. 70.

² Macrobius, Saturnalia, I: 7: 25.

There will now be those who will try to minimalize the import of the above celestial association with agriculture by postulating that it all stemmed through diffusion from the earlier Sumerian version. It is, however, difficult to maintain that a Sumerian, or even a somewhat later Mesopotamian, concept would have managed to filter through to a tribal community in deepest Africa that remains entrenched in primitive lore down to the present. The reference here is to the Dogon of Mali whom we discussed above and who retain a profound enthusiasm—one can even call it a passion—for granaries. As Edwin Krupp noted: "The importance of granaries in a society that depends on the cultivation of grain is easy to understand."

What is not easy to understand is why the Dogon hold the granary as "a model of the cosmos." What is there about grain to tie it to the sky? Why do these people believe in what Krupp referred to as a "transcendental celestial granary" that originally belonged to the gods. It is quite telling that the Dogon continue to believe that the very process of fashioning the world could not have begun "without seeding the earth with celestial order from the granary from heaven."

TRIPTOLEMOS

As already noted, Triptolemos taught people how to sow. As Arthur Cook demonstrated, depictions on ancient vases "show Triptolemos as a bearded man holding a bunch of corn [that is, grain] and sitting on a single-wheeled seat" that is sometimes shown high in the air above the ground, thus bespeaking its celestial nature. In other instances, grain is shown enmeshed in his braided hair. But was he really a Saturnian deity like the agricultural gods discussed above?

Triptolemos' parentage is such a mess of poetic contradictions that the Athenian playwright Aristophanes "found ample material for a parody" when it came to his pedigree. Even so, although Triptolemos' snake or dragon car was said to have been given to him by a goddess, it also happens to be one of the most distinguished Saturnian assets. In that respect, if in no other, the two deities can be said to be avatars of each other.

Besides that, as both Cook and Stephen Langdon inform us, the iconography of Triptolemos is replicated by that of other deities among whom we run across Dionysos. Not only that, but Triptolemos and Dionysos were sometimes depicted on opposite sides of the same vase, as if to indicate their syncretic identity.

¹ E. C. Krupp, Skywatchers, Shamans & Kings (N. Y., 1997), p. 163.

² Ibid.

³ Ibid.

⁴ Ibid.

⁵ A. B. Cook, Zeus: A Study in Ancient Religion, Vol. I (N. Y., 1964), p. 213,

⁶ *Ibid.*, p. 222.

⁷ *Ibid.*, p. 212.

⁸ Ibid., p. 211; A. S. Murray, loc. cit.

⁹ See here, for instance, D. Cardona, op. cit., pp. 303-304.

¹ S. H. Langdon, op. cit., p. 43; A. B. Cook, op. cit., pp. 214, 216, 231.

² *Ibid.*, p. 214.

That Dionysos was the embodiment of Saturn, we need not repeat. Moreover, Dionysos was also called Helios, whom the Greeks themselves identified as the planet Saturn before the name got transferred to the present Sun. It might have been this that heightened Cook's misidentification of Triptolemos' high-flying car as "an early expression" of the Sun. 4

THE CORN GOD

Triptolemos was not the only deity associated with cultivation. Even the Egyptian Osiris, who was thought of as the general god of agriculture, was explicitly associated with corn.⁵ More than that, he was actually thought of as the very personification of corn,⁶ as long as it is understood that grain was actually meant. Thus it was that, during the annual festival of sowing, an effigy of the god was made from soil that was impregnated with seed. The figure was then buried by the priests and when, later, it was recovered, grain—that is wheat or barley—was found to have sprouted from it. It was thus conjectured that the grain was produced from Osiris himself who had given up his body to feed the people.⁷ "The ceremony was, in fact, a charm to ensure the growth...by sympathetic magic."

It was no different on the opposite side of the ocean in Mesoamerica where maize was regarded as the food of the gods. According to the Quiché Maya, both the yellow and white ears of corn—in this instance maize—were created by deities. Hun-Nal-Ye was the Mayan maize god, and while the deity is usually referred to as First Father, his name actually translates as One-Maize-Revealed. As Ken Moss noted, this name closely resembles that of Itzam-Yeh which carries the meaning of Itzam Revealed. What is additionally important about this is that Moss, as already indicated, has ably demonstrated that Itzam-Yeh is one of the most prominent proto-Saturnian deities in Mesoamerica.

Maize had such a sacred grip on ancient Mexicans that the Maya, as well as the Toltecs, were of the opinion that man was said to have been actually made of maize.¹

"Maize and men are shown to be intimately related throughout Classic Maya iconography, in the post-Classic screenfolds and in post-Columbia texts from both Yucatan and the Guatemalan highlands, notably the Quiche genesis in the *Popul vuh*."²

¹ D. Cardona, God Star (Victoria, British Columbia, 2006), p. 312; idem, Flare Star (Victoria, British Columbia, 2007), pp. 92, 114, 127-128.

² W. A. Heidel, *The Day of Yahweh* (London, 1929), p. 481.

³ F. Boll, "Kronos-Helios," Archiv für Religionwissenschaft, XIX (1916-1919), pp. 343 ff.

⁴ A. B. Cook, op. cit., p. 225.

⁵ E. A. W. Budge, loc. cit.

⁶ J. G. Frazer, The Golden Bough: The Roots of Religion and Folklore (N. Y., 1890/1981), p. V. I-307.

⁷ Idem, The Golden Bough: A Study in Magic and Religion (London, 1922/1974), p. 496.

⁸ Ibid., p. 497

⁹ G. Thompson, Ancient Egyptian Maize (Seattle, 2010), p. 9.

¹⁰ R. Van Over, Sun Songs: Creation Myths From Around the World (N.Y., 1980), p. 102.

¹¹ K. Moss, "Maya Cosmos: A Saturnian Interpretation," AEON Vol. I, No. 1 (February 2001), p. 80.

¹² *Ibid*.

¹³ *Ibid.*, pp. 84 ff.

¹ G. Brotherston, *Image of the New World* (London, 1979), p. 157.

² *Ibid.*, p. 118.



Stone bust of Hun-Nal-Ye—the Mayan Maize God. (Photograph courtesy of the British Museum, London, England.)



Maize—mainstay of the Maya. (Photograph by the author, courtesy of the Museum of the Mayan People, Dzibilchaltun, Mexico.)

And from the Popul Vuh itself:

"... this is the beginning when man was invented...The dawn [had] already appeared; the creation [had] already been made, and there [was] clearly a nourisher appearing, a supporter, born of light, engendered of light...In the darkness, in the night time...There came then yellow corn ears and white corn ears...And then the yellow corn was ground, and the white corn...and it became man's grease, and turned into his fat."

Very much like the earlier Egyptians, the Aztecs, too, celebrated a sowing festival which they called Xilomaniztli at the appearance of the young green cobs. Unlike the Egyptians, however, they celebrated the appearance of the crop with human blood.²

"Hence the ancient Mexicans, conceiving the maize as a personal being who went through the whole course of life between seed-time and harvest, sacrificed new-born babes when the maize was sown, older children when it had sprouted, and so on till it was fully ripe, when they sacrificed old men."

¹ Popul Vuh as quoted in ibid., pp.165-167.

² C. A. Burland, Myths of Life and Death (N. Y., 1974), p. 102.

³ J. G. Frazer, The Golden Bough: The Roots of Religion and Folklore (N.Y., 1890/1981), p. V. I-307.

Down into modern times, the Cheyenne Amerinds continued to believe that they had received their corn in those ancient times when their ancestors had still been residing in the north. And if we are to believe the Zuni, corn was created by Sky-father "in the dark of the early world-dawn." Among their ceremonies, various Amerinds also held harvest dances as earnest requests for the renewal of corn.

MITHRAS

The god Mihtras—otherwise rendered Mitra or Mithra—was a member of one of India's various divine triads, which triad included Varuna and Aryaman. This threesome was later increased to a company of seven, and later still to one of twelve. That the members of the original triad were known as the Adityas is illustrative since the term translates best into "Celestial Deities." Varuna's identity as Saturn need not be re-stressed. Aryaman's functions, on the other hand, are so ill defined that not much can be said concerning his identity. It was entirely different with Mithras who, among other things, was considered a god of grain. The god is said to have originated in Iran, that is ancient Persia, where various sculptures also depicted him as a god of grain.

Even so, can Mithras really be identified as the proto-Saturnian deity of our concern? While David Talbott had no doubt concerning the god's Saturnian identity, it behooves us to dig a little deeper. In that respect, we first note that Mithras was considered to have been "the most characteristic and important figure of the Iranian pantheon." As Krupp rightly recorded, Mithras' epitome "identifies him above all as an emissary of celestial light" whose "luminous power dispelled the darkness and cleared the way for the [coming] sun." In Iran, Mithras was held as the divinity who exhibited "the most splendour," which splendour was known as kvarnah (variously transliterated). Thus, the oldest known Mithraic monument, erected by Antiochus I of Commagene, in southern Turkey, depicts Mithras's celestial character through the rayed disk that frames his head.

In conformity with proto-Saturn's lasting presence at Earth's north celestial pole, Mithras was described as a god who never slept.¹² Very much like Triptolemos and other Saturnian deities, however, the proto-planet's later involvement with motion was envisioned as the

¹ A. Ortiz, American Indian Myths and Legends (N.Y., 1984), p. 29.

² R. Van Over, op. cit., p. 25.

³ V. Ions, *Indian Mythology* (London, 1967), p. 15.

⁴ Ibid.

⁵ Ibid.

⁶ D. A. Mackenzie, Myths of Babylonia and Assyria (London, 1915), republished as Mythology of the Babylonian People (London, 1996), p. 55.

⁷ D. N. Talbott, *The Saturn Myth* (N. Y., 1980), pp. 58, 209, 293.

⁸ A. Pagliaro, "Notes on the History of the Sacred Fires of Zoroastrianism," in J. D. C. Pavry (Ed.), Oriental Studies in Honour of Cursetji Erachji Pavry (London, 1933), p. 378.

⁹ E. C. Krupp, Beyond the Blue Horizon (N. Y., 1991), p. 145.

¹⁰ A. Pagliaro, loc. cit.

¹¹ E. C. Krupp, loc. cit..

¹² Ibid.



Corn dance by the Santa Clara Pueblo Amerinds.
(Illustration by Peter F. Copeland.)

god's swift travels in a "high-wheeled chariot."1

One particular sculpture that was probably carried to England by Roman soldiers who, in time, were strongly captivated with this particular deity, depicts Mithras as "emerging from an egg." Others have explained this iconic figure as springing from an egg-shaped rock. As it was said by some, "Mithra had no mother, but was miraculously born of a female Rock, the petra genetrix, fertilized by the Heavenly Father's phallic lightning." And also:

"The rock of Mithras's birth contains both light and fire; he who is born from the rock is thus a fiery god of light. Mithras's birth is [thus] a cosmic event."⁵

That the proto-Saturnian deity was the offspring of a cosmic egg should also not be forgotten.

Very much like the Greek Kronos, not to mention the Scandinavian Odin, Mithras was also attended by ravens.⁶ On an altar piece that is now preserved in the Wiesbaden Museum, he is additionally shown with a crow, one of the god Saturn's most prominent symbols, perched on his fluttering mantle.⁷

In the end we could simply point to Claudius Ptolemy who reported that the inhabitants of Mesopotamia revered the star of Saturn "as Mithras Helios," which again presents Helios as one of the original names of the planet Saturn. It might have been due to this particular name that Anthony Aveni referred to Mithras as "the Persian sun god." He did, however, indicate that the god's "dualistic counterpart was Saturn, the sun of night." This is so true that, unlike the present Sun, the Helios in question was said to have "come to the celestial pole," where proto-Saturn had for long been stationed.

Despite Franz Cumont's belief to the contrary, it has, however, to be noted that the Mithraic bull-slaying cult that emerged in Rome had absolutely no connection with the original deity. As it was asked during an international congress that was held in England in 1971, is it not possible that the Roman Mithraic cult that had such a dynamic effect on the rise of Christianity had simply borrowed the name of the deity "to give itself an exotic oriental flavor?"¹²

As far as the present reconstruction is concerned, the Roman Mithra did not really borrow the name of an earlier deity. What really transpired is that, visually, the overlapping of the two Mityhraic deities under consideration originally appeared as one, which is why they

¹ A. Pagliaro, loc. cit.

² S. G. Hyslop & B. Pohanka, *Empires Ascendant* (Alexandria, Virginia, 1990), p. 121; see also D. Talbott & W. Thornhill, *Thunderbolts of the Gods* (Portland, Oregon, 2005), p. 10.

³ D. Ulansey, "Solving the Mithraic Mysteries," Biblical Archaeology review (September/October 1994), p. 52.

⁴ D. A. Leeming, The World of Myth (N. Y., 1990), p. 197.

⁵ M. J. Vermaseren, Mithras, the Secret God (N. Y., 1963), p. 76.

⁶ A. B. Cook, op. cit., p. 443.

⁷ *Ibid.*, p. 516.

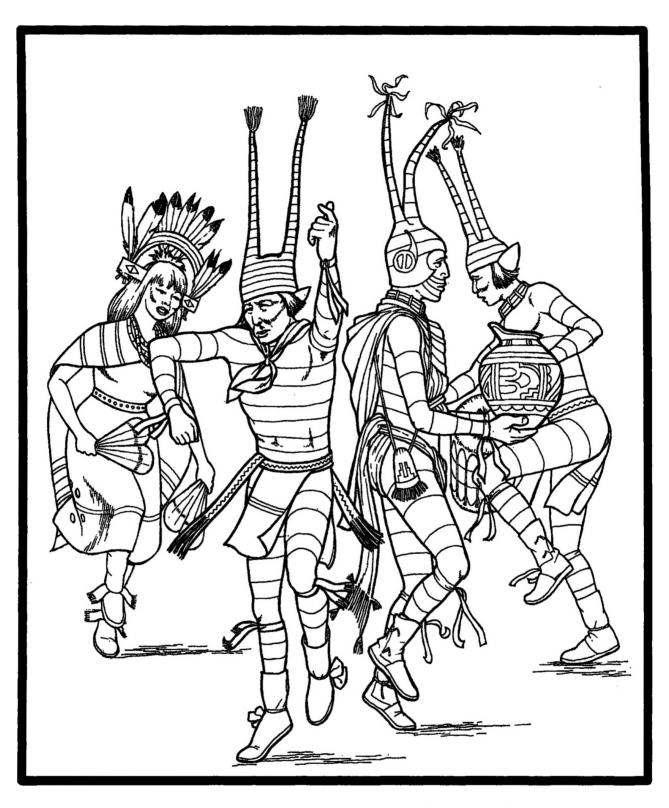
⁸ Claudius Ptolemy, Tetrabiblos, 2:3:64.

⁹ A. Aveni, Conversing With the Planets (Boulder, Colorado, 2002), p. 156.

¹⁰ Ibid. (emphasis added); D. Cardona, God Star (Victoria, British Columbia, 2006), pp. 141 ff.

¹¹ H. D. Betz, The Greek Magical Papyri in Translation (Chicago, 1986), p. 51.

¹² D. Ulansey, op. cit., pp. 42, 46.



Koshare rainbow dancers whose energetic prancing is believed to influence the growth of corn. (Illustration by Peter F. Copeland.)

ended up sharing the same name—but, for the sake of chronology, that will have to be discussed in a forthcoming work.

THE ORIGIN OF MAIZE

There have been many claims that maize was available in Europe, Africa, and India long before Christopher Columbus is believed to have brought it from America.¹ Chances are that it were the Arabs, or Moors, who first introduced maize to Spain rather than the other way around.² That maize was not brought out of America by Columbus has been proposed by Gunnar Thompson.³ But that maize is to be found depicted on ancient Egyptian and Middle Eastern artefacts, which he also claimed,⁴ has not been validated. Other authorities who reached a similar opinion claimed that maize had to have been introduced into Europe, Africa, and Asia by "Hindu voyagers, or other mariners...centuries before Columbus." But did they, really?

The association of corn with the proto-Saturnian deity discussed above bespeaks the antiquity of its first appearance. To be sure, the origin of corn, or maize, has been contested for quite some time with the tall grass known as *teosinte* that had been known from Mexico and Guatemala vying against a volcanically-induced presently-extinct pollen grain as its ancestor.⁶ Despite whatever else he claimed concerning maize that cannot be considered valid, Thompson was entirely correct concerning its mysterious origin. As he wrote:

"Maize is a plant of miracles and mystery. Known to scientists by the taxonomic term Zea mays...it remains an enigma to historians and to plant biologists."

So, likewise, with Catherine Dold who wrote of corn's "mysterious origins," and Mary Eubanks who referred to it as "an incredible puzzle."

"Just where did corn come from?" asks Dold, who then tells us that botanists "have repeatedly crossed scientific swords over proposed answers to this question..."¹⁰

As Thompson tells us in agreement: "No scientist, agronomist, archeologist, or historian working in the Plant Sciences or in the Humanities Fields has yet been able to cultivate a convincing explanation regarding the origins of the maize plant."

And:

¹ J. Bailey, The God-Kings & the Titans (N. Y., 1973), p. 34.

² Ibid

³ G. Thompson, Ancient Egyptian Maize (Seattle, 2010), in toto.

⁴ Ibid.

⁵ *Ibid.*, p. 54.

⁶ "The Origin of Maize," New Scientist (November 12, 1981), p. 433; C. Dold, , "The Corn War," Discover (December 1997), pp. 110, 112.

⁷ G. Thompson, op. cit., p. 6.

⁸ C. Dold, op. cit., p. 109.

⁹ *Ibid.*, p. 113.

¹⁰ *Ibid.*, p. 109.

¹¹ G. Thompson, loc, cit.

"Controversies continue to range whenever plant scientists share the podium at conventions. Although three divergent theories have prevailed in the academic community, none of the proponents have offered a sufficient explanation regarding the hazy origins of the plant. In labs all across the country, scientists have attempted to reconstruct the genetic matrix of ancestral corn from wild 'corn grasses'—so far, without success."

To which he then adds:

"The essential problem seems to be that all the earliest forms of ancestral corn became extinct thousands of years ago—so retracing the evolutionary steps or adaptations backwards through genetic manipulation is nearly impossible. Some of the vital genetic material has simply been lost."²

It must not be thought that too much is being made of all this because, in reality, maize is an exception when it comes to edible grains. As Jared Diamond ably noted, since cereals were so productive in the wild, few additional changes had to be made to them under cultivation.³

"Contrast [the] quick evolution of wheat and barley with the story of corn...Corn's probable ancestor, a wild plant known as teosinte, looks so different from corn in its seed and flower structures that even its role as ancestor has been hotly debated by botanists for a long time. Teosinte's value as food would not have impressed huntergatherers: it was less productive in the wild than wild wheat...and it enclosed its seeds in inedible hard coverings."

Mary Eubanks has not only conducted extensive research into the subject, but has also been involved in experimental hybridization in which she managed to reproduce plants resembling the world's most anciently known corn that had been archaeologically excavated in Mexico. To be sure, however, while some of her plants do somewhat resemble primitive maize, "others look more like plain grasses." Even so, as Eubanks stressed, while her hybrid "doesn't look much like corn," genetically speaking "looks aren't everything." What she mainly ended up accomplishing, however, was the vehement antagonism of other scientists most of whom branded her work as "nonsense." As time went by, however, she started getting more respect from a few other botanists and even managed to change the minds of some of her former skeptics.

Paul Manglesdorf, who was Eubanks' mentor, had proposed that maize was indisputably present in the Americas around 80,000 years ago. More recent investigators, on the other

¹ Ibid.

² *Ibid.*, pp. 6-7, 157.

³ J. Diamond, Guns, Germs, and Steel (N.Y., 1999), pp. 136-137.

⁴ *Ibid.*, p. 137.

⁵ C. Dold, op. cit., p. 110.

⁶ Ibid.

⁷ *Ibid.*, p. 113.

⁸ P. C. Manglesdorf, Corn: Its Origin, Evolution, and Improvement (Boston, 1974), p. 15.

hand, have reached a date for the domestication of maize in Mexico sometime between 5,000 to 7,000, and even 10,000 years ago, which dates match our benchmark figures for proto-Saturn's flare-up and the eventual dismemberment of its planetary system. But let us take all this a step further.

Despite Eubanks' experimental evidence, the closest candidate to wild maize is still believed to have been the *teosinte* weed. As it has been noted, however, proponents of the *teosinte* theory "didn't have thousands of years for their favorite plant to undergo the necessary mutations" that led it to develop into hundreds—if not thousands—of corn varieties. Despite the supposition that "only three or four major genetic mutations are necessary in order to transform teosinte into maize," after decades of experimental genetic horticulture, "nobody has yet managed to turn the weedy [teosinte] into golden sweet corn."

Taking various matters into consideration, Gunnar Thompson has suggested that protomaize had to have "evolved in changing Pleistocene and post-Pleistocene environments" that would have included "temperate marshes fed by melting glaciers" in which proto-maize would have "experienced unusually high levels of mutation due to electrical storms" that would also have "caused earlier varieties to become extinct." And if that does not concur with our expanding proto-Saturnian theory, I do not know what does.

Proto-Saturn's flare-up would not only have melted the Ice Age glaciers, it would have immersed Earth in a long lasting heat-wave the likes of which it had not experienced since the advent of humankind. The most significant point mentioned by Thompson, however, is the electric storms he held responsible for the mutation of what he terms proto-maize into its modern varieties. In our case, the activating electrical upheaval would have been of cosmic proportions due to proto-Saturn's flare-up. That this outburst was responsible for the mutational change in various life forms—plants, animals, and even mankind—has already been touched upon in the present work, but in much more detail in the pages of its prequels.

Germination, adaptation, and genetic changes have actually been successfully achieved by Guido Ebner and Heinz Schürch in Switzerland by exposing cereal seeds, as well as fish eggs, to an electrostatic field.

"Unexpectedly primeval organisms grew out of these seeds and eggs: a fern that no botanist was able to identify...wheat that was ready to be harvested in just four to six weeks. And giant trout, extinct in Europe for 130 years, with so-called salmon hooks. It

⁶ *Ibid.*, p. 162.

¹ C. Dold, loc, cit.; V. H. Malmström, Cycles of the Sun, Mysteries of the Moon (Austin, Texas, 1997), p. 17.

² G. Thompson, op. cit., p. 158

³ *Ibid.*, p. 157.

⁴ *Ibid.*, p. 159.

⁵ Ibid.

⁷ See back to pages 111-112.

^{*} D. Cardona, *Flare Star* (Victoria, British Columbia, 2007), pp. 473-484; *idem*, *Primordial Star* (Victoria, British Columbia, 2009), pp. 349-351

⁹ W. Arber, et al., "The 'Primitive Code'—the Ecological Alternative to Controversial Genetic engineering!" www.urzeit-code.com (Report of Recent Events 2008/2009).

was as if these organisms accessed their own genetic memories on command..."

Most importantly for our study, however, is the growth of primeval maize from the cereal seeds that were subjected to this experiment. More than that, although the ears and stalks of the resultant maize were somewhat smaller than those of the modern variety, this innovative product achieved more ears per plant.²

As both Ebner and Schürch noted, this was not the same as mutational evolution since no entirely new organisms were created.³ What they seem to have really accomplished was to revert the specimens of their experiments to their hardier primeval state. It does, however, indicate what electric fields can accomplish.⁴

As an aside—the process was so fruitful that it was patented by the Swiss pharmaceutical company formerly known as CIBA, presently rendered NOVARTIS, that was and continues to be the foremost in sales throughout the world. The research was, however, stopped in 1992 when it was realized that primeval cereals generated by an electric field would require hardly any fertilizers or pesticides that were sold by the very same chemical company. But when Ebner and Schürch both passed away in 2001, Ebner's son, Daniel, took up the experiments on a private basis. 6

THE DEVELOPMENT OF AGRICULTURE

As we have already noted, the very implementation of farming was believed to have been initiated by the proto-Saturnian deity. In China, among other names and titles, the deity was known as Shin-nung, the "Divine Husbandman," who continued to be remembered as "the fabulous originator of the art." Although we have already touched upon this subject, the Egyptian Osiris was not only associated with grain and the origin of agriculture, he was by some actually believed to have terminated mankind's cannibalistic tendencies by his tuition in the art of planting and his instruction in the manufacture of agricultural tools.

As in other matters, it is unfortunate that belief in "a legendary or mythological origin of farming has long been out of fashion." And yet as Jonathan Leonard ably noted:

"...the question of how men became food producers instead of merely food gatherers cannot be answered precisely, and the exact steps by which they did so are likely to remain hidden in the remote past. What can be said with reasonable certainty, however,

¹ Ibid.

² Ibid.

³ Ibid.

⁴ For those who are interested further in these experiments, see Luc Bürgin, *Der Urzeit-Code* (Munich, 2007).

⁶ D. M. Ebner, "Primeval Code—Reactivated," read at the World Mysteries Forum, in Basel, Switzerland, 2008.

⁷ F. S. Dobbins, Error's Chains: How Forged and Broken (N.Y., 1884), p. 467.

⁸ J. N. Leonard, The First Farmers (N.Y., 1973), p. 35.

⁹ Ibid.

is that the steps were first taken in the Near East, where traces of plant cultivation are the oldest known, dating back at least 9,000 years."

Once again, that this is agreeably close to proto-Saturn's approximated date of its flare-up is more than evident. And it was, at least according to some experts, in the following 4,000 years that farming spread to remote terrestrial areas including China and even South America.² This approximate date for the beginning of agriculture continued to be reiterated down the years. Humanity's release from hunting and gathering, so Jared Diamond claimed back in 1987, "was facilitated only 10,000 years ago, when in different parts of the world people began to domesticate plants and animals." As the title of his article indicates, Diamond was of the opinion that farming turned out to be humanity's worst mistake. And, not surprisingly, there were others who also thought so but for different reasons than the ones offered by Diamond. Among the evidence that Diamond offered concerning this mistake was the following:

"Archaeologists have demonstrated that the first farmers in many areas were smaller and less well nourished, suffered from more serious diseases, and died on the average at a younger age than the hunter-gatherers they replaced. If those first farmers could have foreseen the consequences of adopting food production, they might not have opted to do so."

This was strongly indicated, if not outrightly proved, through palaeopathology, the study of disease in prehistoric human remains, as per the following:

"The study of the sample of skeletal remains from South Asia showed that there was a decline in body stature, body size and life expectancy with the adoption of farming. A broadly similar result was obtained by the analysis conducted on skeletons from prehistoric populations in Georgia, USA—i.e. the health of the hunters was markedly better. In the case study of the Levant region there was a slight increase in the level of health with the initial adoption of farming, but this was followed by a marked decline once intensive agriculture and husbandry were fully established. Of the 13 regional studies, 10 showed that the average life expectancy declined with the adoption of farming."

So, likewise, according to Geoffrey Carr:

"In truth, agriculture turned out to be a Faustian bargain. Both modern and fossil evidence suggests that hunter-gatherers led longer, healthier and more leisured lives

¹ Ibid.

² *Ibid.*, p. 53.

³ J. Diamond, "The Worst Mistake in the History of the Human Race," Discover (May 1987), p. 64.

⁴ *Ibid.*, pp. 64-66.

⁵ E. J. Tramer, et al., "The Worst Mistake," Discover (July 1987), pp. 94-95.

⁶ J. Diamond, Guns, Germs, and Steel (N.Y., 1999), p. 105.

⁷ R. Rudgley, The Lost Civilizations of the Stone Age (N. Y., 1999), p. 8.

than did farmers until less than a century ago."1

And also according to Michael Balter who wrote that "the rise of agriculture was not such an enviable development as boosters of progress might have us believe."²

"[Marshall] Sahlins maintained that hunter-gatherers, rather than being poor, starving brutes who needed to be rescued from famine by the blessings of civilization, were actually so well off that they represented 'the original affluent society'..."

In fact, as Diamond noted, there have been many hunter-gathering cultures that have come in contact, and traded with, self-sustaining farming societies without seeing the need to succumb to the same mode of livelihood.⁴ As Jane McIntosh noted, "farming communities were for millennia the minority in most of Europe, and in some areas, especially Atlantic regions and the north, hunting and gathering remained the preferred way of life."⁵

Mitochondrial DNA that was extracted from skeletons of the earliest known European farmers strengthened the contention that "modern Europeans largely descended from Paleolithic hunter-gatherers" while those "ancient pioneers who brought farming to Europe...seem to have virtually disappeared genetically."

All of which made many wonder why agriculture was adopted. "Why humans came to domesticate plants and animals at some particular point in time remains somewhat of a mystery," wrote Gregory Possehl. "It seems to be a phenomenon that developed just after the opening of the Holocene in several regions of both the Old and New Worlds." And: "Why it did not occur earlier is not known."

In the meantime, while dates continued to cluster around 10,000 years ago, the spread from the gathering of wild grain to its eventual planting in controlled areas and harvesting by human hands turned ever more specific—as note the following:

"Toward the end of the last Ice Age, around 10,000 B.C., communities in the Near East started to harvest cereal grains with flint sickles and grind them with stone mortars and pestles. By 9000 B.C. intensive collecting of cereals had spread to villages in northern Syria, which apparently lay outside the natural habitat of the plants involved. This would have required grains to be deliberately sown by humans. The final stage in domesticating cereal plants must have been taken by 8000 B.C." 10

¹ G. Carr, "The Proper Study of Mankind," *The Economist* (December 25, 2005/January 6, 2006), p. 10 following p. 74.

² M. Balter, The Goddess and the Bull (N.Y., 2005), p. 166.

³ Ibid.

⁴ J. Diamond, loc. cit.

⁵ J. McIntosh, *Life in Prehistoric Europe* (Oxford, 2006), p. 31.

⁶ C. Q. Choi, "Descent in Europe," Scientific American (January 2006), p. 32.

⁷ G. L. Possehl, *Indus Age: The Beginnings* (Pennyslvania, 1999), p. 412.

⁸ Ibid.

⁹ Ibid.

¹⁰ P. James & N. Thorpe, Ancient Inventions (N. Y., 2006), p. 381; see also J. Diamond, Guns, Germs, and Steel (N. Y., 1999), p. 100.

That same date, however, had also been given by other authorities for the origin of farming in North America.

"The earliest evidence of agriculture in the New World comes from Mexico. By 8000 B.C. some of the American foragers had learned to domesticate some of the wild plants whose seeds had long formed a part of their diet, and were raising half a dozen crops."

The concurrence of these dates, even if we take them as approximations, have bewildered authorities for quite some time. To quote James Davis:

"We simply don't know why farming began in the New World so soon after it began in the old one. Did the climate of the world suddenly get harsher everywhere at the same time, forcing everyone to quickly find out how to grow food instead of gathering it? Prehistorians have found no proof of this. Did an Old World farmer sail to the New World and teach the Indians how to raise crops and tend cows? That's unlikely. Perhaps the discoveries of farming, and then of civilization, were just an astounding coincidence."

More than that, however, it is not yet known among orthodox authorities why agriculture was invented, not only in the New World, but just about everywhere, and why at the approximate period around 10,000 years ago.³

"Just why our ancestors did not get around to inventing agriculture any earlier is one of the biggest questions archaeologists specializing in the Neolithic period...are trying to answer."

Moreover:

"The question can also be put another way: why did humans bother to invent agriculture and settle down in such close quarters, instead of continuing to romp across the landscape, hunting and gathering?"⁵

When it comes to dates, however, it can be said that they have a habit of clashing with one another just as do the authorities who propose them. This is exemplified by the claim that "around 7000 B.C."—that is 9,000 years ago—"the first settlement of farmers were appearing in eastern Greece and on the island of Crete...all introduced from the Near East," as also in southern Italy, Sicily, and further up the Alps.⁶ How could this have been the case when the agriculture in the Near East, from where it *later* spread to Europe, has been claimed to have also been established 9,000 years ago?¹

¹ R. Claiborne, et al., The First Americans (N. Y., 1973), p. 111.

² J. C. Davis, *The Human Story* (N. Y., 2004), p. 168.

³ M. Balter, op. cit., p. 2.

⁴ *Ibid.*, p. 3.

⁵ Ibid.

⁶ J. McIntosh, op. cit., p. 29, 32.

¹ J. N. Leonard, loc. cit.

There is then the excavations that took place at Ohalo II on Israel's Sea of Galilee that has been claimed to be 23,000 years old. And there, "traces of 143 kinds of wild plant seeds, including ancestors of wheat and barley," have come to light. But here's the nub: The people who inhabited Ohalo did not plant or harvest crops, since no evidence of agriculture has been discovered there or anywhere around. And yet, judging by the grinding equipment unearthed at the site, it is quite obvious that they did gather the wild grains which they seem to have ground into flour for baking.²

Ohalo was not the only such site. There is also a series of dwellings belonging to the Natufian culture that were discovered at Mallaha—otherwise known as Eynan—on the shores of the dried-out Lake Hula in the Jordan Valley that were dated to 10,000 B.C.—that is 12,000 years ago.³ While these dwellings were deemed surprisingly large for the time in question, they were unsurprisingly—at least to us—circular in shape,⁴ as also in the Balkans where houses were laid out in concentric circles.⁵

Just as in Ohalo, cereals were also beginning to be harvested in Mallaha, but not cultivated, as neither were animals domesticated. In other words, the Natufians were not farmers. Just as in Ohalo, that was because wild wheat and barley grew of their own accord as they continue to grow in profusion around the same area down to the present.

One more thing that can be said about the Natufian inhabitants of Mallaha is that, judging by their skeletal remains, they were tall and robust, contrasting with the smaller, less nourished, and somewhat sickly farmers who followed.

In the meantime, discoveries that, among other places, came from Dhra', a site near the Dead Sea in Jordan, dated to somewhere around 11,000 years ago, provides strong evidence that granaries were constructed before the domestication of plants.¹⁰

"The evidence for granaries is most clearly seen in the excavations at Dhra', but can be inferred at Nativ Hagdud and Gilgal I. Surprisingly, these granaries provided means of storing cultivated plants, and predate the appearance of morphologically domesticated cereals by a thousand years." 11

That the undertaking of agriculture was not the sudden tenacious enterprise that it was once believed to have been is indicated by what the Chinese had to say about it. As Kuo-Cheng Wu informs us, "the dozen or so centuries following the Yellow Emperor," whom we

¹ Z. Zorich, "Origins of Farming Unearthed," Discover (January 2005), p. 72.

² Ihid

³ J. Perrot, "Twelve Thousand Years Ago in the Jordan Valley," CNRS Research (1978), p. 2.

⁴ Ibid.

⁵ J. McIntosh, op. cit., p. 40.

⁶ *Ibid.*, p. 6.

⁷ M. Balter, op. cit., p. 169.

⁸ J. Perrot, op. cit., pp. 6, 8.

⁹ *Ibid*., p. 5.

¹⁰ I. Kuijt & B. Finlayson, in O. Bar-Yosef (ed.), "Evidence for Food Storage and Predomestication Granaries 11,000 Years Ago in the Jordan Valley," pnas.org (June 22, 2009), p.1.

¹¹ Ibid. (emphasis added).

now know to have been a surrogate for the proto-Saturnian deity, "was a period in which the pendulum of Chinese society was swinging back and forth between the nomadic and agrarian way of life." And this did not only occur in China. "The adoption of cultivation must not be confused with the adoption of a sedentary life," wrote Vere Gordon Childe. Thus, "although the Natufians lived in permanent settlements of up to several hundred people, they were foragers, not farmers, hunting gazelles and gathering wild rye, barley, and wheat."

It therefore seems that in most places communal habitations were constructed long before farming took hold. Even in the Near East, where farming is supposed to have originated, excavations have demonstrated that "sedentism—living in permanent or semipermanent houses or other structures—sometimes preceded agriculture by thousands of years."

Needless to say, there were exceptions. Thus, for instance, archaeologists in Mexico, Panama, and Ecuador, to name but a few, "have recently found evidence that humans began domesticating squashes some 10,000 years ago, about 5,000 years before they began to settle in permanent villages."

But to go on: The Neolithic village of Çatalhöyük in modern-day Turkey has been dated to somewhere between 7500 and 5700 B.C., that is between 9,500 and 7,700 years ago. Originally discovered by James Mellaart in 1958, the site has been brought into greater prominence through the continued excavations by an international team of archaeologists led by Ian Hodder. As elsewhere, this site was also found to contain evidence of "at least fifteen edible plant species, including large quantities of domesticated wheat, barley, and peas."

There is then Mehrgarh which came to light in 1974. The remains of this Neolithic site is located in an arid mountainous region on the Iranian plateau that includes portions of southwestern Pakistan, southeastern Iran, and a small area in southwestern Afghanistan. Its earliest layers have been dated to around 7,000 B.C.—that is 9,000 years ago—at which early date its people, rather than simply harvesting cereals, were already efficient farmers. And to that, one can add Tepe Sarab in western Iran as well as Jarmo in Iraq. 8

Despite the assertions of the authorities concerned, and at the risk of being accused of grinding our own axe, it is the claimed dates for these, and other sites, that strike us as being somewhat off base. Let us be honest: The supplied dates are close enough, but, in our opinion, just a little bit too early including the accepted date of 9,000 B.C.—that is, 11,000 years ago—for Göbekli Tepe. Hunter-gatherers would have had no reason to give up their way of life that early in time. If, as we have been claiming, and as other indications uphold, proto-Saturn's flare-up occurred somewhere around 10,000 years ago, communal habitations, much less farming, would seem out of the question before that. Primeval clans would have first attempted to shield themselves from the ensuing catastrophic events down here on Earth,

¹ K-C. Wu, The Chinese Heritage (N. Y., 1982),p. 36.

² M. Balter, op. cit., p. 168.

³ C. C. Mann, "The Birth of Religion," National Geographic (June 2011), p. 56.

⁴ M. Balter, op. cit., p. 97.

⁵ *Ibid.*, p. 169 (emphasis as given).

⁶ *Ibid.*, p. 41.

⁷ G. L. Possehl, "Mehrgarh," in B. Fagan (ed.) Oxford Companion to Archaeology (Oxford, 1996).

⁸ M. Balter, op. cit., p. 165.

including the fiery bombardment from the sky. Only later would survivors have attempted to re-settle in areas that would have seemed safe from further cataclysms. As we have often indicated, both in this very work as also in its prequels, the dating methods, including radiometric ones, that we currently employ can best supply approximations that are quite often claimed to be, when not mistaken for, actual dates by those proposing them.

GLOBAL WARMING

In attempting to come to grips with the reason behind the abandonment of what is still considered to have been a resourceful way of life by hunter-gatherers in favor of a much more difficult agrarian livelihood, archaeologists and anthropologists "have swung back and forth" between different proposals. Among varying concepts, they were bound to consider a drastic change in climate. Still under the impression that the Ice Age affected the entire Earth, they began to reason that the warmth that followed its termination and the origin of farming was "no coincidence." It was "the warmer conditions of the Holocene," or so they stressed, that "made agriculture possible, necessary, desirable, or some combination of these or other factors."

As Hodder claimed back in 2006:

"It is now widely accepted that climatic and vegetational change at the end of the Pleistocene provided a context in which sedentism could occur. As warming happened, large stands of wild cereals grew in parts of Anatolia, the Middle East and the Levant. The availability of these grasses was undoubtedly a factor in allowing greater sedentism."

But that this could not be *entirely* so is indicated by those many sites, only some of which have been mentioned above, in which sedentism had for long *predated* agriculture.

That climatic change, especially the return of warmth to Earth's former glaciated belt, would have been amenable to plant growing there is no doubt. But this would only have affected those northern regions within Earth's shadowed ring. The rest of the world would have always been disposed to warmth. Besides, due to proto-Saturn's immobile station in Earth's north celestial pole, the world's northern hemisphere, apart from its shadowed area, would have always been immersed in slightly greater warmth than its southern one. As we have often indicated, Earth's southern hemisphere would have received its heat through proto-Saturn's reflective rays as they bounced off the opaque inner surface of its encasing plasmasphere. This is adequately supported by various indications that, during the Holocene, dynamic climatic changes were more active in Earth's northern hemisphere. In fact, studies

¹ M. Balter, op. cit., 173.

² *Ibid.*, p. 97.

³ *Ibid*., p. 164.

⁴ *Ibid.*, pp. 164, 173-174.

⁵ I. Hodder, The Leopard's Tale (Lonbdon, 2006), p. 243.

¹ See here, for instance, C. A. Jessen, et al., "Climate Change: Solar Activity Forced CO₂ Variability in Early Holocene," Global and Planetary Change, Vol. 57, No. 4 (June 2007).

have actually stressed the "climatically stable Southern Hemisphere in the early Holocene." While this situation is claimed to have been due to solar activity, the reason why solar rays in a present-like system would have affected Earth's northern hemisphere differently from its southern one remains inexplicable.

The paleoclimatologist William Ruddiman saw fit to reverse the process by claiming that it was the origin of farming that led to global warming. New evidence, he has written, suggests that concentrations of carbon dioxide started rising about 8,000 years ago.³ But how could farming lead to global warming when it was global warming that terminated the Ice Age, which termination transpired long before the origin of farming? Besides which, carbon dioxide would also have been emitted by the tremendous volcanic eruptions that occurred world-wide over a long period of time in the wake of proto-Saturn's flare-up.

What we stress, and doubly so, is the following:

"Wild wheat and barley, unlike their domestic versions, shatter when they are ripe—the kernels easily break off the plant and fall to the ground, making them next to impossible to harvest when fully ripe. Genetically speaking, true grain agriculture began only when people planted large new areas with mutated plants that did not shatter at maturity, creating fields of domesticated wheat and barley that, so to speak, waited for farmers to harvest them."

The question, then, boils down to this: What was it that was responsible for the mutation of these wild grasses? To us, the answer is quite simple. As already noted in relation to corn and the experiments by Ebner and Schürch, it had to have been due to the electrostatic force inherent in proto-Saturn's cosmic flare-up.

THE SACRED PLOUGH

Once farming took hold, it did not take long for farmers to improve the tools they needed to cultivate the fields.

"In the early phases of the Neolithic period farmers invented a variety of ploughs to work different grades of soil...The final stage of seed planting was accomplished with the use of a seed-plough. This implement had a special feature called a seed-funnel that deposited seeds directly into the furrow at the right depth and in regular spacing."

That this was so is indicated by the fact that depictions of seed-ploughs first appear on Babylonian cylinder seals that have been dated to the middle of the third millennium B.C.¹

¹ Ibid.

² Ibid.

³ W. F. Ruddiman, "How Did Humans Alter Global Climate?" Scientific American (March 2005), p. 46

⁴ C. C. Mann, op. cit., p. 49 (emphasis added).

⁵ G. White, op. cit., p. 161.

¹ Ibid.

More than that, however, the same Babylonians held the plough as being sacred to Enlil, who, as we have already noted, was regarded as the chief god of farming. In time they even ended up placing the plough in the sky—or, at least, a stellar representative of it—in Earth's north circumpolar region. The plough's yoke they bound to "the pole of the ecliptic... the eternal centre-point of the heavens."

"In Assyria," as Gavin White tells us, "the Plough is dedicated to the national god Aššur, who is the Assyrian counterpart of Enlil."

"The traditional attributions [of the plough] are summarized by King Sennacherib who installed the following inscription during the rebuilding of the New Year ritual house: 'The first month is the month of father Enlil, the month of the observation of the Plough-star, the festival of the banquet of Aššur, the king of the gods."⁵

If not the plough, at least the hoe was ceremoniously used by Egyptian kings at the founding of temples when the pharaoh would use it to dig a pit down to the water line. This was the manner in which the temple was mytho-historically founded "in the primordial waters" of Creation. ⁶

In China, the plough was made to play a sacred role during the spring festival dedicated to farming in which the emperor himself proceeded to the Temple of Agriculture in his capital city. There, amid the numerous high ministers of his court, he guided what became known as "the imperial plough" around a plot of land that was reserved for that special purpose. Animals were also offered to Shin-nung, the Divine Husbandman. Since the emperor could not have been everywhere at once, leading mandarins performed similar rituals in all the principal cities of the empire.

Similar rituals are also known in relation to Buddhism in India and what used to be known as Ceylon, now renamed Sri Lanka. These were, and in some areas still are, conducted around domed buildings known as topes that serve for the preservation of relics rather than temples. Once a tope is built, a dedicated representative also guides a sacred plough, sometimes made of gold, and often drawn by two elephants, right around the building. Needless to say, all within the drawn furrow is then considered sacred ground.¹

In Greece, the plough was often shown being held by Triptolemos, whom we have seen introducing agriculture.² In fact, his name has been said to derive from a term meaning the

¹ *Ibid.*, pp. 163-164.

² Ibid.

³ Ibid.

⁴ Ibid.

⁵ Ibid.

⁶ J. M. Lundquist, The Temple: Meeting Place of Heaven and Earth (London, 1993), p. 7.

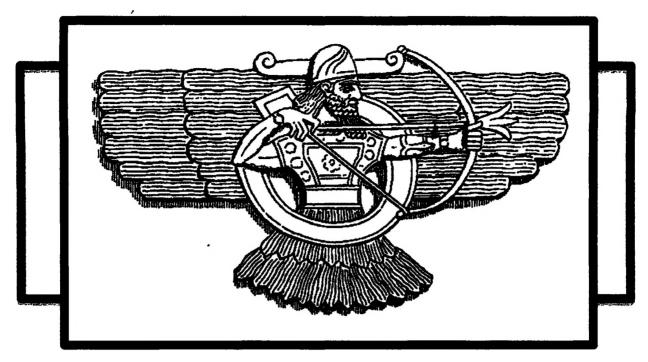
⁷ C. Boyle, et al., The Natural World (Alexandria, Virginia, 1991), pp. 62-63.

⁸ F. S. Dobbins, loc. cit.

⁹ Ibid.

¹ *Ibid.*, p. 536.

² A. B. Cook, op. cit., p. 223.



The Assyrian god Aššur, the equivalent of the Babylonian Enlil.

"thrice-ploughed field," that would have been symbolic of proto-Saturn's three main encirclements, the very "fields" that the god furrowed in the sky.

THE GOD OF WINE

Peter James and Nick Thorpe have suggested that the growing of grapes for fermenting into wine might have been one of the very motives behind the origin of agriculture.² Just for the record we do *not* agree with that, but we do concur with what else they had to say concerning the antiquity of wine-making, as in the following:

"Archaeological discoveries have shown that grapes were being eaten and, more than likely, pressed for their juice, by 8000 B.C., and there is no reason why the accidental invention of wine could not have happened at an equally early date. Grape skins contain enough yeast and sugar to begin fermentation without any additives—in the right circumstances a container of crushed grapes left for a few days will turn into wine."

Archaeology, according to David Rohl, has established Armenia as "the place where wine was invented." Although that may be a little too specific, James and Thorpe have zeroed in

¹ *Ibid.*, p. 224.

² P. James & N. Thorpe, op. cit., p. 329.

¹ Ibid

² D. Rohl, Legend: The Genesis of Civilization (London, 1998), p. 146.

on the Near East in an area that does include Armenia, as well as Turkey, Syria, Jordan, and Lebanon.¹

According to mankind's mytho-historical record, it was Dionysos—also rendered Dionysus—who was not only considered the god of wine but the deity who actually discovered the vine and the art of *making* wine, for which gift all men were said to worship him.² Thus a Coptic relief from Egypt that is now housed in the Louvre Museum as well as other portrayals show Dionysos surrounded or accompanied by vines loaded with grapes.³ Among the Romans, the god of wine was known as Bacchus whom Publius Vergillus Maro, popularly known as Virgil, equated with the Egyptian god Osiris.⁴

In Thrace, which happens to be the center of the most ancient cult of Dionysos, the god was assumed to have had the shape of a serpent.⁵ That the serpent was one of the forms associated with the proto-Saturnian deity we need not repeat. Although we have already shown the identity of Dionysos as one of various Greek deities that turn out to have stood for the Saturnian god,⁶ we here present additional evidence. For one thing, like other Saturnian eminences, Dionysos was also considered as a deity of grain and agriculture.⁷ He is also reported to have been "the first to yoke oxen to the plough, which before had been dragged by hand alone." Another telling characteristic involved the celebration of his ceremonies during the night, which accords well with the folkloric recollection of proto-Saturn's shining as a sun of night. This reminiscence was brought into greater prominence by the shining of a bright light at night during the Thracian festival honoring the god in his own sanctuary. And, very much in accordance with the encirclement of the proto-Saturnian deity, Dionysos' head was said to have been "bound up with a band." There is also his association with the seven days of Creation that is confirmed by his epithet Hepdomeus which translates as "of the seventh day," that is the Sabbath.

As with Bacchus, Dionysos was also equated with the Egyptian Osiris. As James Frazer noted, "Herodotus found the similarity between the rites of Osiris and Dionysus so great, that he thought it impossible the latter could have arisen independently; they must, he thought, have been recently borrowed, with slight alterations, by the Greeks from the Egyptians." So

¹ P. James & N. Thorpe, op. cit., pp. 328-329.

² Eusebii Pamphili, Evangelicae Praeparationis, II: ii: 53b.

³ D. Rohl, op. cit., p. 145.

⁴ F. T. Elworthy, The Evil Eye: The Origins of Practices of Superstition (N. Y., 1971), p. 185.

⁵ L. Farnell, *The Cults of the Greek States*, Vol. V, (New Rochelle, 1977), p. 166.

⁶ D. Cardona, God Star (Victoria, British Columbia, 2006), pp. 4, 5, 8-11, 13, 80, 312-314, 317, 443-446; idem, Flare Star IVictorias, British Columbia, 2007), pp. 92, 114, 127-130, 230; idem, Metamorphic Star (Oregon, 2011), pp. 226-227, 301.

⁷ J. G. Frazer, The Golden Bough: A Study in Magic and Religion (London, 1974), p. 510.

⁸ Ibid.; see also Eusebius Pamphili, op. cit., II: ii: 53c.

⁹ Eusebii Pamphili, loc. cit..

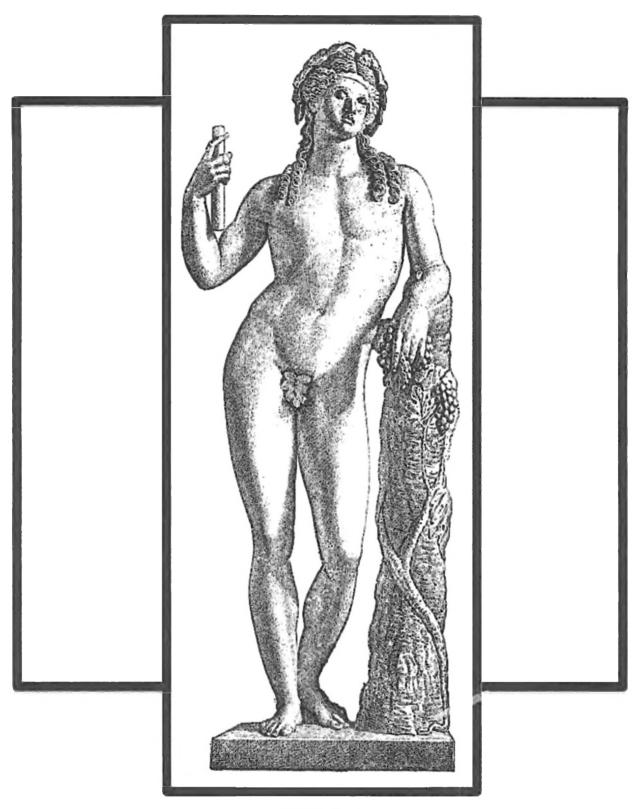
¹⁰ D. Cardona, God Star (Victoria, British Columbia, 2006), pp. 141 ff.

¹¹ J. G. Frazer, loc. cit.

¹² Eusebius Pamphili, op. cit., II: ii; 53 d.

¹ W. A. Heidel, The Day of Yahweh (N. Y., 1929), p. 484.

² J. G. Frazer, The Golden Bough: The Roots of Religion and Folklore (N. Y., 1890/1981), p. V. I—319, quoting Herodotus, Historiae, II:49.



DIONYSOS

also with Plutarch who insisted on "the detailed resemblance of the rites of Osiris to those of Dionysus." In fact, in much later times, the births of both Osiris and Dionysos were celebrated on January 6th which was even later, at least originally, adopted as the birthday of Jesus. Dionysos, however, was known by various other epithets, and, under the name Dusura, his birthday was celebrated by the Nabataeans on December 25th, which was also later adopted, and finally accepted, by Christians as the *real* birth date of Jesus. This is not surprising since Christianity was known to embrace various pagan beliefs in its early endeavors to convert people from other creeds. In order to avoid contradictions, however, January 6th was eventually dropped in favor of December 25th for the celebration of Christmas.

In view of Dionysos' role as the god of wine, it is understandable that Dionysiac rituals included the drinking of the god's sacred beverage. Anthesteria, so Marija Gimbutas tells us, "was a Festival of Flowers in honour of Dionysus as the god of spring, and included drinking and rejoicing."⁵

"The second day of the festival was called *Choes*, the Day of the Cups. The wine was taken from the jars and brought to the sanctuary of Dionysus...where it was silently distributed in small jugs among all citizens over the age of four."

And as Frazer additionally informs us, the drinking of wine in these Dionysiac festivals was not an act of revelry, but conducted as a solemn sacramental rite.⁷

The cultivation of wild grasses did not only lead to the fermentation of grapes into wine, but also to the brewing of beer from malted grain, the chemical evidence of which stretches as far back as 4000 B.C.⁸

ANIMAL DOMESTICATION

Having learned to tame wild grasses into more edible grains, it did not take long to learn how to tame certain animals into more serviceable ones.

"Where or when man and his barnyard friends first formed their partnership can never be traced with exactness. But most of the evidence so far indicates that it began somewhere in the Near East around 8000 B.C., with the rise of permanent settlement. Like communal life and plant cultivation, it could not have happened suddenly in one particular village but instead developed gradually over a period of thousands of years. And the domestication included not only food-producing animals but also beasts of burden and even household pets."

¹ Ibid, quoting Plutarch, Isis et Osiris, 35.

² L. M. Greenberg, "The Lord of Light." AEON, Vol. III, No. 4 (December 1993), p. 19.

³ W. A. Heidel, op. cit., p. 488

⁴ S. Langdon, op. cit., p. 16...

⁵ M. Gimbutas, The Goddesses and Gods of Old Europe (London, 1982), p. 228.

⁶ Ibid.

⁷ J. G. Frazer, op. cit., p. V. II—90.

⁸ D. Alexander, "Sweet Tooths in the Stone Age," Archaeology Odyssey (November/December 2003), p. 17.

⁹ J. N. Leonard, op. cit, p. 75.

The 10,000 years ago that the above 8,000 B.C. translates into has been taken up by various authorities as the date for animal domestication. Slightly before that date, Göbekli Tepe's builders already seem to have had wild, but not domesticated, sheep with them. Within 1,000 years of Göbekli Tepe's construction, or so it has been claimed, however, other sites in the immediate region were already corralling sheep, cattle and pigs.

The remains of sheep, goats, dogs and cattle have also been found in the ruins of Çatalhöyük which, as we have seen, has been dated to somewhere between 9,500 and 7,700 years ago.⁴ Although it is not stated exactly when during that span of time, it was still diagnosed to have been "the earliest known center of cattle domestication." And yet, it has also been claimed that, together with plants, domestic animals had already been introduced in Greece and Crete in 7000 B.C., that is 9,000 years ago.⁶ Could seven hundred years been enough to introduce the domestication of animals from the Nar East into southern Europe?

INDUSTRIOUS COMPANIONS

The telltale date of 10,000 years ago has even been cropping up in relation to the first domestication of cats in the Fertile Crescent.⁷ As it has been generally assumed: "Early settlements in the Fertile Crescent between 9,000 and 10,000 years ago, during the Neolithic period, created a completely new environment for any wild animals that were sufficiently flexible and inquisitive (or scared and hungry) to exploit it."

Remains of cats that have been found at Jericho, in Palestine, have been dated to somewhere around 7000 B.C.⁹ That is the same date that has been supplied for the domestication of animals in Greece and Crete—see above. Even more contradictorily, what has been called "the best candidate for the *first* domestic cat comes from Khirokitia, in Cyprus, around 6000 B.C."¹⁰

Contradictory dates aside, it has been determined that, due to waste products, house mice, as well as trash heaps, were bound to have invaded village homes, and these, in turn, would have attracted wild cats.¹¹

"Both these food sources would have encouraged cats to adopt to living with people; in the lingo of evolutionary biology, natural selection favored those cats that were able to cohabitate with humans and thereby gain access to the trash and mice...Considering that

¹ D. Alexander, loc. cit.; J. C. Davis, op. cit., p. 11.

² A. Curry, "Gobekli Tepe: The World's First Temple?" smithsonianmag.com/history-archaeology/gobekli-tepe (November 2008), p. 2.

³ Ibid.

⁴ M. Balter, op. cit., p. 41.

⁵ Ibid.

⁶ J. McIntosh, op. cit., p. 32.

⁷ R. Stein, "Scientists Determine the Facts of the Feline Origin," The Vancouver Sun (April 19, 2008), p. D7.

⁸ C. A. Driscoll, et al., "The Taming of the Cat," Scientific American (June 2009), p. 71.

⁹ P. James & N. Thorpe, op. cit., p. 439.

¹⁰ *Ibid*. (emphasis added).

¹¹ C. A. Driscoll, et al., op. cit., p. 72.

small cats do little obvious harm, people probably did not mind their company. They might have even encouraged the cats to stick around when they saw them dispatching mice and snakes."

That dogs evolved from wolves is no secret. In fact there is evidence that wolves were attracted to hunter-gatherer campfires and food scraps left by them as early as 11,000 B.C., that is 13,000 years ago, long before communal settlement, farming, or the domestication of cattle and other breeds. It was through these early contacts that wolves became tamed and began to transform into man's best friend.² As James and Thorpe ably tell us:

"Both [felines and wolves] were tempted from the wild by the benefits of human company into a partnership that has not only lasted thousands of years but has also resulted in major p[h]siological changes: Wolves became dogs, and wild felines became cats. Since they must have made the first moves, dogs and cats in a sense invented themselves. We in turn invented the concept of the pet: unlike other animals, we have always kept dogs and cats, as much for the simple reason that we like them as for the help they give us."

"By cornering, bringing down, or even retrieving prey, early dogs were invaluable to hunters, and it is likely that the process of wolf taming took place independently in several parts of the world, from the Americas to Australia."

Dogs, in fact, have been claimed to be the first animals that were disciplined into submission.⁵ And yet, again, as we have seen, while there were some authorities who had maintained that animals had not yet been domesticated in 10,000 B.C. Mallaha,⁶ there had already been others who thought differently since the remains of what was believed to have been a three-to-five-month-old puppy had earlier been discovered in a grave together with a skeleton that might have been that of an old woman.⁷ But then here's the nub: The remains of dogs that have been discovered in Yorkshire, England, have been dated to about 9,000 B.C.⁸ And if that seems too early, think about this: Based on paleontological evidence, Siberian hunters "seem to have first domesticated wolves as early as 33,000 years ago."

While those who have been reporting these discoveries are not to be blamed, there is no way in which *any* of these dates can actually be correct. Even as approximations, especially in conjunction with the origin of farming, most of them still seem to be a little bit too early.

¹ Ibid.

² P. James & N. Thorpe, op. cit., p. 436.

³ Ibid.

⁴ *Ibid.*, p. 437.

⁵ J. McIntosh, *op. cit.*, p. 23.

⁶ *Ibid.*, p. 6.

⁷ P. James & N. Thorpe, op. cit., p. 437.

⁸ Ibid.

⁹ H. Pringle, "The 1st Americans," Scientific American (November 2011), p. 45 (emphasis added).

LACTOSE INTOLERANCE

Humans had to adapt in order to be able to digest milk from animals, and this adaptation was achieved through the *fast* evolutionary change in the human genome, which, as with other factors we have already touched upon, seems also to have transpired sometime within the past 10,000 years." As the biostatistician Katherine Pollard explains:

"In most species, only nursing infants can process lactose. But around 9,000 years ago...changes in the human genome produced versions of *LCT* [that is the gene for lactase] that allowed adults to digest lactose. Modified *LCT* evolved independently in European and African populations, enabling carriers to digest milk from domesticated animals. Today adult descendants of these ancient herders are much more likely to tolerate lactose in their diets than are adults from other parts of the world, including Asia and Latin America, many of whom are lactose-intolerant as a result of having the ancestral primate version of the gene."

In fact, as the anthropologist Henry Harpending stated, "in China and most of Africa, few people can digest fresh milk into adulthood."

"Yet in Sweden and Denmark, the gene that makes the milk-digesting enzyme lactase remains active, so almost everyone can drink fresh milk, explaining why dairy farming is more common in Europe than in the Mediterranean and Africa."⁵

And yet it was, and remains, not all that good or simple. Man's decline in health with the adoption of farming has already been touched upon. That decline, however, was mainly—even if not entirely—brought about through mankind's contact with the animals he succeeded in breeding. To quote the anthropologist Richard Rudgley: "The domestication of animals that took place on a major scale with the advent of farming had, along with its benefits, the unforeseen result of allowing the transmission of numerous infectious diseases from these domesticates to their human masters."

At least thirty of the diseases that man inherited from the animals he started breeding, including the often-fatal diphtheria, came about from his imbibition of milk. As the palaeopathologist Don Brothwell stated, it was mainly "the practice of dairy farming" that resulted in "the spreading of such diseases."

¹ R. Bernstein, "Evolution of Tibetan Gene took only 3,000 years," The Vancouver Sun (July 3, 2010), p. B4.

² T. H. Saey, "Frozen Mummy's Genetic Blueprints Unveiled," sciencenews.org (February 28, 2012).

³ K. S. Pollard, "What Makes Us Human?" Scientific American (May 2009), p. 48.

⁴ R. E. Schmid, "Researchers: Human Evolution Speeding Up," Associated Press at AP.org (December 10, 2007).

⁵ Ibid.

⁶ R. Rudgley, loc. cit.

⁷ Ibid.

⁸ Ibid.

TIME STANDING STILL

Specificity aside, all of the above rightly tells us that the origin of husbandry and animal domestication, with their mixed harmful and benign results, clustered around the period that followed proto-Saturn's flare-up once both the land and the sky above had settled into a relatively less violent environment. As it, however, transpired, there were those who never did acclimatize themselves to their new surroundings and they continued to live in the same manner their ancestors had done previous to Earth's drastic environmental transformation. Such are the Hadza of Tanzania who have persisted in their ancestors' old way down into the present. Not only that, but they seem to have continued to live close to the same general area that their ancestors had done in a valley "in which some of the oldest fossil evidence of early humans have been found."

"Genetic testing indicates that they may represent one of the primary roots of the human family tree—perhaps more than 100,000 years old. What the Hadza appear to offer—and why they are of great interest to anthropologists—is a glimpse of what life may have been like before the birth of agriculture 10,000 years ago."

Their language is "not closely related to any other that still exists." They grow no food, raise no livestock, and have no permanent dwellings or even shelters. They have no use for official leaders. "No Hadza adult has authority over any other." Conflict and/or confrontation is unknown among them. Family differences are resolved by simply separating into different camps. And when it comes close to conflict with outsiders, they "have almost always moved away rather than fight."

They continue to lead a hunter-gatherer existence.¹⁰ They have no known history of famine.¹¹ They have never been threatened by infectious diseases.¹² The passage of time—hours, days, weeks, months and years—has no meaning to them.¹³ They do not even have words for numbers past four.¹⁴ They "enjoy an extraordinary amount of leisure time."¹⁵

They do not practice wedding ceremonies, birthdays, or anniversaries, but monogamy is practiced by some where both men and women liberally change spouses every few years.¹⁶

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<sup>1</sup> M. Finkel, "The Hadza," National Geographic (December 2009), p. 104.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid., p. 100.

<sup>4</sup> Ibid., p. 104

<sup>5</sup> Ibid., p. 105.

<sup>6</sup> Ibid., p. 106.

<sup>7</sup> Ibid., p. 104.

<sup>8</sup> Ibid., p. 106.
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⁹ *Ibid.*, p. 112. ¹⁰ *Ibid.*, p. 94.

¹¹ Ibid., p. 104.

¹² Ibid.

¹³ *Ibid.*, p. 100.

¹⁴ Ibid., pp. 100, 102.

¹⁵ *Ibid.*, p. 104.

¹⁶ *Ibid.*, p. 106.

Women sing songs, men tell stories, but, despite the fact that gender roles are distinct among them, there is no forced subservience for the women. In fact, marriage break-ups are often instigated by the women. As Micahael Finkel, who lived among them for a while, reports, "woe to the man who proves himself an incompetent hunter or treats his wife poorly."

"There is not much room in their lives, it seems, for mysticism, for spirits, for pondering the unknown. There is no specific belief in an afterlife...There are no Hadza priests or shamans or medicine men. Missionaries have produced few converts."

When one of them dies, they simply bury him or her. Yet even that is a somewhat modern institution since not so long ago they simply left the corpse on the ground to be eaten by hyenas.⁴

The only god they know is the Sun,⁵ even though one wonders if that belief stems from their ancestral memory of the proto-Saturnian one.

Although Finkel claims that time has not really stood still for the Hadza,⁶ as far as they are concerned it might as well have. Not only are they still living in the manner their ancestors did in that long-gone era, they remain as living proof concerning what nature was like prior to proto-Saturn's blinding flare up—an era during which there was no way in which to calculate the passage of time; an era during which agriculture and animal breeding had not yet become essential; an era during which humanity was much healthier with most of our present diseases not yet gripping hold of humanity; an era during which religion, with its shamanistic and priestly burdens, had not yet encumbered life; an era during which no rulers were ever needed; an era during which mankind lived in general contentment. Nor are the Hadza the only people who continue to lead a hunter-gatherer type of life.⁷ The pity is that some Tanzanians look upon the Hadza "as an embarrassment" to their "modernizing nation."

¹ *Ibid.*, p. 116.

² *Ibid.*, p. 106.

³ *Ibid.*, p. 113.

⁴ *Ibid*. p. 118.

⁵ *Ibid.*, p. 113.

⁶ *Ibid.*, p. 104.

⁷ Ibid.

⁸ *Ibid*., p. 105.

Part Two

Chapter 19

The Goddess

THE CORN MOTHER

We have now reached a point where a confession is in order. We have so far been stressing the origin of agriculture's association with the proto-Saturnian deity. Truth be told, however, the origin of agriculture was also directly linked to a *female* deity who, in Europe, is mainly, even if not exclusively, known as the Corn Mother. There is, regrettably, too much to tell on this particular subject, so we shall have to be concise, and yet specific enough, to convey not only how wide the traditional lore of this particular deity has spread, but the intensity—nay, even passion—of its present hold among the people of Europe's most advanced cultures. In Anglo-Germanic countries, besides the more distinct Corn Mother, the deity is also known as Mother of the Wheat besides various similar designations, as so, similarly, among the Slavs.

"The Poles and Czechs warn children against the corn-mother who sits in the corn [by which "grain" is usually meant both here and in what follows except in relation to the Americas]. Or they call her the Old Corn-woman, and say she sits in the corn and strangles the children who tread it down."

So, also, among the Lithuanians who likewise claim that the Old Rye Woman sits in the corn. Among the Slavs, the Corn Mother is also known as the Rye Mother, the Wheat Mother, the Oats Mother, the Barley Mother, according to whatever crop is grown in whatever district. These beliefs have led to various curious customs that continue to be performed down to the present. Thus, the Corn Mother "plays an important part in harvest customs" since she "is believed to be present in the handful of corn which is left standing last on the field." It is with the cutting of this "last handful" that she is said to be caught or driven away or even killed.

"In the district of Hadeln (Hanover) the reapers stand round the last sheaf and beat it with sticks in order to drive the Corn-mother out of it...The beating goes on till the grain is completely threshed out; then the Corn-mother is believed to be driven away."

¹ J. G. Frazer, The Golden Bough: The Roots of Religion and Folklore (N. Y. 1890/1981), p. 332.

² M. Eliade, Patterns in Comparative Religion (London, 1996), p. 337.

³ J. G. Frazer, loc. cit.

⁴ Ibid.

⁵ Ibid.

⁶ *Ibid.*, p. 335.

⁷ *Ibid.*, p. 333.

¹ Ibid.

Europe, however, is not the only place where this goddess continues to be worshipped. The Corn Mother, otherwise known as Grandmother Growth, is even known in the Americas, especially in Mexico among the Huichol Indians. The baton she is there depicted as carrying is in the form of a serpent "and a symbol of herself" that is said to possess "the power of making corn." On the back of one of her images is another serpent, but this one is coiled, the very image of proto-Saturn's ejected matter. Much more than that, the Corn Mother is made to stand on a disk in the centre of which a star-like figure is painted in red.

So, also, in Peru where, to this day, certain societies continue to venerate Zara Mama, the Maize Mother, who "was represented by a puppet made of stalks of maize dressed in full female attire" and believed to hold "the power of producing and giving birth to much maize." And so, similarly, throughout Asia.⁶

There are various other superstitious beliefs and enactments associated with the Corn Mother in different parts of northern Europe and the rest of the world, but their enumeration and descriptions would not, of themselves, get us closer to the deity's identification and/or the reason behind her connection to corn and agriculture. We shall, however, discuss some particular customs in relation to the last sheaf since they serves to illustrate a specific Christian sacrament.

HOLY COMMUNION

"Even in pious Sweden," Frederick Elworthy tells us, "the flour from the grain of the last sheaf, supposed to contain the corn spirit, is baked into a loaf in the shape of a girl, which is divided amongst the whole household and eaten by them." And Sweden is only one of various European countries in which similar rituals are conducted. In these particular cases, however, the "corn spirit" was not everywhere considered to be female, but, as we have already noted, just as often male. So, for instance, at La Palisse, France.

"In these examples the corn-spirit is represented and eaten in human shape. In other cases, though the new corn is not baked in loaves of human shape, still the solemn ceremonies with which it is eaten suffice to indicate that it is partaken of sacramentally, that is, as the body of the corn-spirit."

In Ireland, the great festival in which "the first wheat cakes were prepared and shared out as a kind of sacramental thanksgiving" included the sacrifice of bulls. And, as Cottie Burland

¹ C. Lunholtz, Symbolism of the Huichol Indians, Volume III of Memoirs of the Museum of Natural History (N. Y., 1900-1907), pp. 52-53.

² *Ibid.*, p. 54.

³ Ibid.

⁴ Ibid.

⁵ J. G. Frazer, *The Golden Bough: A Study in Magic and Religion* (London, 1974), p. 543.

⁶ *Ibid.*, pp. 542, 544 ff.

⁷ F. T. Elworthy, The Evil Eye: The Origins and Practices of Superstition (N.Y., 1971), p. 111.

⁸ Ibid.

⁹ J. G. Frazer, op. cit., p. 630.

¹⁰ Ibid.

¹ C. A. Burland, Myths of Life & Death (N. Y., 1974), p. 153.

documented, while the Irish festival was gradually forgotten, "echoes of it still remain in harvest-home celebrations."

Similar ceremonies can be found among the Hindus and other religious associations in India, the Ainu of Japan, in Indonesia, and just about the rest of Asia where, in some countries, the Mother of Rice supplants the Corn Mother.² And so, similarly, in Africa.³

The ceremony was even celebrated in the Americas, especially by the Aztecs in Mexico, long before these tribal units and civilizations came in contact with the Spanish conquistadores and their Christian missionaries. Twice a year, in what to us are May and December, an image of Huitzilopochtli was made out of dough, broken into pieces, and "solemnly eaten by his worshippers." In fact, the ceremony was actually called *teoqualo*, which means "god is eaten." Additional to that, an identical ceremony was also practiced by the same Aztecs, once every four years, in honor of Tezcatlipoca.

It can thus be seen that the Eucharist, or Holy Communion as it is also called, in which bread, or a thin host made of flour, together with wine, are said to be miraculously transformed into the body and blood of Jesus, and then consumed by Christian worshippers, was another ritual that was borrowed from a ceremony that had been in vogue much earlier throughout most of the inhabited world.

NIDABA

In returning to our female deity, it is interesting to note that, in Ireland, the Corn Maiden was believed to have been the beloved of Balor, whom we have already seen equated with the proto-Saturnian god. The relation of the goddess in question with a male deity who was himself associated with agriculture is, however, much older than Irish tradition. It was, in fact, already known in Sumer, the earliest civilization that we presently know of. It was on seals of this "primitive period," so Stephen Langdon tells us, that the Grain-goddess is shown together with a male deity of vegetation, whom Langdon correctly recognized as Tammuz. That Tammuz is to be identified as the proto-Saturnian deity we have already specified.

The name of this corn and/or grain goddess has come down to us as Nidaba, who was said to have been created by Enlil, whom we have also seen identified as the proto-Saturnian god. To clinch the matter, a Sumerian hymn to the Grain-goddess "describes the age before man had built cities, sheep-folds, and cattle-stalls." Thus, as it was said, "it was Nidaba, the Grain-goddess, who inaugurated the age of civilization."

¹ Ibid.

² M. Eliade, op. cit., p. 339.

³ J. G. Frazer, op. cit., pp. 632 ff.

⁴ Idem, The Golden Bough: The Roots of Religion and Folklore (N. Y., 1981), Part B, p. 79.

⁵ *Ibid.*, p. 81.

⁶ E. G. Squier, The Serpent Symbol (N. Y., 1975), pp. 178, 179.

⁷C. A. Burland, loc. cit.

⁸ S. H. Langdon, Semitic Mythology, Vol. V of C. J. A. MacCulloch (ed.), The Mythology of All Races (N. Y., 1931/1964), p. 90.

⁹ *Ibid.*, p. 78.

¹⁰ *Ibid.*, p. 193.

¹ Ibid.

² Ibid.



Impression of a Sumerian seal depicting Nidaba in front of Tammuz.

ISIS

The Egyptian Isis was one of the best known and beloved female deities in antiquity whose fame traveled well beyond the confines of Egypt. "Her influence in the Roman empire reached as far as Britain, where, even today, many bridges on the River Thames bear her image." In time, she became "identified with practically every goddess and deified woman of the known world."

"When Christianity triumphed...Isis's devotees passed quietly over to the worship of another Mother...[with] her statues serving afterwards as images of the Madonna [mother of Jesus]."³

Although she is not often described as having been associated with agriculture, Isis was believed to have introduced farming to mankind. The Greek historian known as Diodorus Siculus, who based his assertions on Egyptian authority, had no qualms in presenting Isis as the discoverer of wheat and barley. As time went by she was bestowed various epithets, some of which, like Creatress of the Green Crop and Mistress of Bread, served to honor her boon to mankind. Not only that, but she was actually personified as the cultivated field itself, which is what one of her epithets, Sochit, actually means. Stalks of grain were carried in procession at her festivals and, at harvest time, reapers would beat their breasts while calling upon her.

¹ F. Fleming, "Living With the Gods," in H. Cleary, et al. (Editors), The Way to Eternity (London, 1997), p. 58.

² J. K. Hord, "The Twilight of the Goddess: An Ancient Religious Revolution," Comparative Civilizations Review, No. 16 (1987), p. 80.

³ Ibid.

⁴ Diodorus Siculus, Bibliotheca Historicea, I: 11-14.

⁵ H. Brugsch, Religion und Mythologie der alten Aegypter (Leipzig, 1891), p. 647.

¹ *Ibid.*, p. 649.

² Diodorus Siculus, op. cit., I: 14.



Isis—From the Temple of Horus at Edfu, Egypt. (Photograph by the author.)

As is most commonly known, Isis was both the sister and honorable wife of Osiris whose proto-Saturnian identity is by now well known to the readers of this work. The classical Greeks identified her with their own Demeter, whom we shall next discuss.

DEMETER

We have already come across the Greek Triptolemos who was believed to have driven around the sky in a snake-drawn single-wheeled carriage while teaching mankind how to sow. And as documented in our previous chapter, that carriage was given to him by a goddess. That goddess was Demeter.

The most popular tale concerning that event runs as follows: In thanksgiving for a service that Celeus, the mythological king of Eleusis in Attica, had rendered her, Demeter taught him how to use the plough.² Triptolemus, who was his son, was then given the carriage in question by the goddess and sent on his agricultural assignment in order to fulfill her obligation.³

To be sure, as the son of Celeus, Triptolemos does not compare all that well as an aspect of the proto-Saturnian deity with whom we have already equated him. But, as we have already noted, extant mytho-histories constitute a mess of paradoxical contradictions when it comes to his parentage.⁴ It is, in fact, more than evident that the mytho-historical tale that presents him as the son of Celeus stems from a traditional version that, for whatever reason, became popular among the Greek peasantry. As we have already shown, it is Triptolemos' characteristics that personify him as an avatar of the proto-Saturnian deity. But what of Demeter who had taught him how to sow?

Very much like the Egyptian Isis, with whom she was identified, it was Demeter who was actually believed to have instigated agriculture,⁵ as the tale concerning Triptolemos well illustrates. To quote James Frazer: "Many of the epithets bestowed by the ancients on Demeter mark her intimate association with the corn [that is, grain] in the clearest manner." Thus, in a hymn to her, she is referred to as the "lady of the crops, the corn, the richly yielding earth," while images of her show her holding sheaves in one of her hands.

Ancient farmers were known to present the first of their harvest to sacred images of Demeter. One statue of the goddess that survived in the ruins of her temple at Eleusis, around which farmers constructed a threshing floor, continued to be venerated down into modern times. And when, during the nineteenth century, crops from around that area began to fail, blame was cast on the British for having carted Demeter's image to the University of Cambridge, in England, where it continues to reside to the present day.

¹ Ibid., I: 13; Herodotus, Historiae, II: 59.

² A. S. Murray, Manual of Mythology (N. Y., 1950), p. 70.

³ Ibid.; Ovid, Metamorphoses, V: 646; idem, Fasti, IV: 508 ff.

⁴ A. B. Cook, Zeus: A Study in Ancient Religion, Vol. I (N. Y., 1964), p. 212.

⁵ A. S. Murray, loc. cit.

⁶ J. G. Frazer, The Golden Bough: A Study in Magic and Religion (London, 1974), p. 522.

⁷ S. Eddy & C. Hamilton, *Greek Myths* (London, 2001), p. 64.

⁸ J. G. Frazer, loc, cit.

⁹ Ibid.

¹ Ibid.



Demeter

CERES

When it comes to this particular goddess, James Frazer quotes the British topographer William Hutchinson who wrote the following:

"I have seen, in some places, an image appareled in great finery, crowned with flowers, a sheaf of corn [in this instance wheat] placed under her arm, and a scycle in her hand, carried out of the village in the morning of the conclusive reaping day, with music and much clamour of the reapers, into the field, where it stands fixed on a pole all day, and when the reaping is done, is brought home in like manner. This they call the Harvest Queen, and it represents the Roman Ceres."

That similar celebrations in honour of agricultural deities continued down into modern times has already been documented. And, to be sure, it was no different with Ceres. As Frederick Elworthy rightly noted, the agricultural spirit which the Romans worshipped as the goddess Ceres "was a cult which still exists unconsciously at our very doors." As he goes on to say, this can be substantiated through the persistent custom of hanging small bunches of plaited ears of corn in modern kitchens. To be sure, however, such bunches, whether of wheat or corn, remain as traditional reminders of agricultural spirits in general and not just in honour of Ceres. Moreover, here in the western world most people no longer remember what lies behind such customs.

Alexander Murray was only partly correct when he noted the probability that "Ceres was but a weak counterpart of the Greek Demeter." For one thing, the counterpart, if one wishes to call it that, was anything but weak. But, more importantly, as we have seen, Ceres' agricultural characteristics are not only identical to Demeter's, but to those of every other agronomic goddess.

THE NAMELESS ONE

The Corn Goddess of the Iroquois has also been likened to Demeter.⁵ But like the Corn Maiden or Corn Mother of other Amerindian tribes, she was never given a name. She is said to have come to the Iroquois when the hunter Gosadaya prayed to the Great Spirit that his people might be granted a source of food that would be more dependable than the animals killed by hunters and the wild plants gathered by their women. A few nights later, a beautiful maiden clad in garments of green and yellow appeared to him, telling him that the Great Spirit had listened to him and had sent her to marry him. She was thereafter known simply as Gosadaya's wife.⁶

¹ Idem, The Golden Bough: The Roots of Religion and Folklore (N.Y., 1981), p. 341.

² F. Elworthy, op. cit., p. 107.

³ Ibid.

⁴ A. S. Murray, op. cit. p. 75.

⁵ J. S. Morgan, When the Morning Stars Sang Together (Agincourt, Toronto, 1974), p. 13.

⁶ *Ibid.*, p. 14.



As the legend goes, the Great Spirit had given her the seeds of corn which she then distributed among the people, showing them how to plant and how to harvest. She even taught them how to grind the corn and bake it into bread.¹

The Penobscot's tale is somewhat different. In their case, not only does the Corn Mother—or First Mother as she is called among them—remain nameless, so does the man who ends up marrying her when she miraculously appears among them. In this case, however, the young maiden does not bring the gift of corn with her. On the contrary, when members of the tribe told her they were hungry, all she did was weep. And when her husband asked her what would make her stop, she told him that he would have to kill her. Although he could not bring himself to do it, he was eventually convinced by the Great Instructor that he should do exactly what she wanted him to do.²

"So it was done. The husband slew his wife and her sons [while praying] dragged her body to and fro as she had commanded, until her flesh covered all the earth [in the space she had earlier indicated]. Then they took up her bones and buried them in the middle of [that place]. Weeping loudly, they [all] went away."

After seven months had passed, the area where her flesh had been strewn was covered with "tall, green tasseled plants" the likes of which had never been seen before. And, additional to that, the smaller area where her bones had been buried was now covered with a different new plant. First Mother's husband called the first plant skarmunal, which we know as corn, and the one from the smaller area he named utarmur-wayeh and, surprisingly enough, it was tobacco.⁴

The Cheyenne tell of Lone Trail Walker who stands for Gosadaya and First Mother's husband. Like them, he, too, prayed to the Great Mystery Power to supply his people with a more dependable source of nourishment than the ever diminishing animals that the hunters were beginning to have to chase farther afield. But here, the Corn Mother, who is known as the Queen of Maize, did not materialize in the flesh. The Great Mystery Power merely granted Lone Trail Walker a vision in which the flames of his camp-fire changed into a beautiful woman and it was she who presented him with a choice from seven different corn plants to take to his people while explaining how to plant and harvest them together with the songs that had to be chanted during these procedures. When he chose an ear that was neither the biggest nor the smallest of the plants, the Queen of Maize vanished from before his eyes and was never seen again. In his hands, however, was the ear of maize that he had chosen which he took to his people to plant according to the Queen's instructions.⁵

It was entirely different among the Pawnee who used to inaugurate their planting season by sacrificing a girl, cutting her body up into separate parts, and burying each piece in a different field.⁶

¹ *Ibid.*, pp. 14-15.

² R. Erdoes & A, Ortiz, American Indian Myths and Legends (N. Y., 1984), pp. 12-13.

³ *Ibid.*, p. 13.

⁴ Ibid.

⁵ H. Hirnschall, *The Song of Creation* (West Vancouver, British Columbia, 1979), Legend No, 26.

⁶ M. Eliade, op. cit., p. 344.

Chapter 20

The Androgyne

ANAT

here is then Anat—also spelled Anath—one of the best known Canaanite deities. Once again, as with other goddesses, while she is not widely represented as an agricultural deity, she has nonetheless been depicted with sheaves of wheat enmeshed in her hair.¹ She was even actually said to have "played a part in fostering vegetation." She was, in fact, well known as a fertility goddess.³

Anath was also known as Qadesh,⁴ which means "Holy," a name that was likewise shared by the goddess Ashtart,⁵ whom the Greeks knew as Astarte.

Under the name Qudshu,⁶ the same as Qadesh, Anath was also introduced to Egypt where depictions of her retained her distinctive Canaanite form.⁷

More than that, Anath's nature was so similar to that of Astarte and Asherah that the three of them "were frequently fused into a single goddess."

Anath was also identified with Ishtar, both of whom were honored as the Queen of Heaven 10

There are, however, some mystifying aspects of the goddess. As evidenced by Canaanite mythology, Anath was "a man-like woman" who was "dressed as a man but girded as a woman." And there is more. According to a distinctive congregation of Jews that thrived in Elephantine, originally known as Syene and/or Yeb, on the river Nile close to Aswan, Anath was also known as Anat-Yahweh, which makes her more of a god than a goddess. Worse still, as we have indicated, Yahweh was no other than the proto-Saturnian deity.

¹ R. Patai, The Hebrew Goddess (N. Y., 1978), p. 52.

² L. Delaporte, "Phoenician Mythology," New Larousse Encyclopedia of Mythology (London, 1972), p. 76.

³ F. G. Bratton, Myths and Legends of the Ancient Near East (N. Y., 1970), p. 113; P. Gaber & W. G. Dever,

[&]quot;The Birth of Adonis?" Archaeology Odyssey (Spring 1998), p. 55.

⁴ L. Delaporte, loc. cit.

⁵ R. Hestrin, "Understanding Asherah—Exploring Semitic Iconography," *Biblical Archaeology Review* (September/October 1991), p. 55.

⁶ Ibid.

⁷ Ibid.

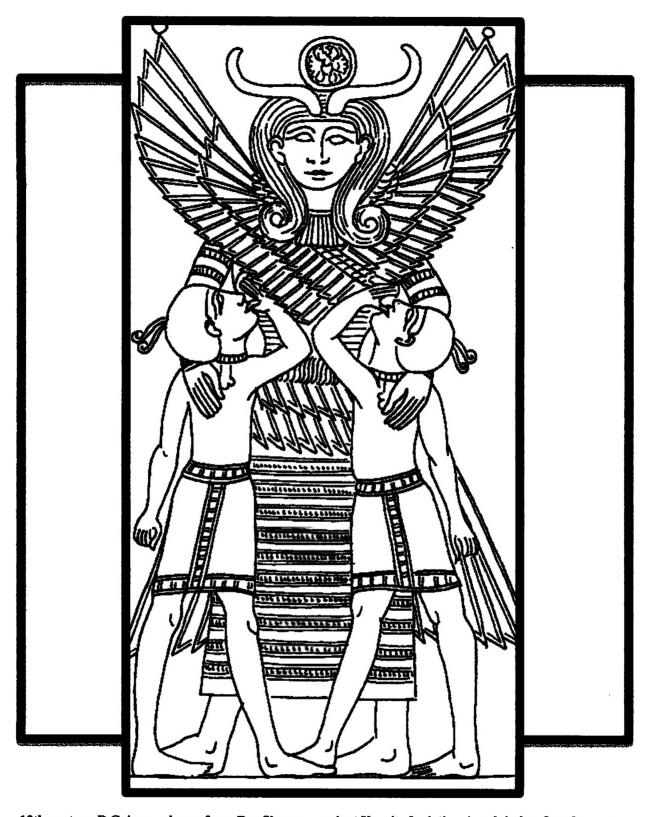
⁸ P. Gaber & W. G. Dever, *loc. cit.*; F. M. Cross, *Canaanite Myth and Hebrew Epic* (Cambridge, Massachusetts, 1973), pp. 28-35.

⁹ S. Langdon, Tammuz and Ishtar (Oxford, 1914), pp. 95-96; idem, Semitic Mythology, Vol. V of C. J. A. MacCulloch (ed.), The Mythology of All Races (N. Y., 1931/1964), p. 26.

¹⁰ *Ibid.*, pp. 25, 30; M. astour, *Hellenosemitica* (Leiden, 1967), p. 261.

¹¹ F. Albright, Yahweh and the Gods of Canaan (N.Y., 1968), p. 129.

¹² C. H. Gordon & G. A. Rendsburg, *The Bible and the Ancient Near East* (N. Y., 1997), pp. 294-295; see also W. F. Albright, *Yahweh and the Gods of Canaan* (N. Y., 1968), p. 135.



13th century B.C. ivory plaque from Ras Shamra, ancient Ugarit, depicting Anath in her female aspect. (Illustration by Marie-Josèphe Devaux.)

ISHTAR—ASHTART—ASTARTE

Anath was not the only deity who was presented in an androgynous form. Seeing that she was identified with other goddesses, as we have just noted, that should be obvious. Among these other goddesses was Ishtar who was worshipped by the Akkadians, Babylonians, and Assyrians. And, to be sure, there was more than one form of Ishtar, all of whom were presented as having been either male or female. In fact, Ishtar has been considered the very prototype of bisexual deities.

A different form of the name Ishtar is Ashtart, under which name she is also known to have been represented in masculine form.³ To the Greeks, Ashtart was known as Astarte, and she, too, was regarded to have been bisexual.⁴

As with Anath, Ashtart was also equated with Yaw, that is the Hebrew god Yahweh.⁵ Coins of the Persian period frequently included the deity as a double headed male-cum-female being, indicating the figure's unmistakable bisexual nature.⁶

THE LOVE GODDESS

Although Isis was often portrayed as the epitome of Egyptian femininity, she was also sometimes thought of as having been androgynous. Thus, in an Abydos temple chant, she is made to refer to herself as the woman who was made a male by Osiris.⁷

If there ever was a goddess of femininity and love par excellence, however, it would had to have been the Greek Aphrodite, whom the Romans worshipped under the name of Venus. And yet even she was believed to have been bisexual. She was sometimes represented as a "male character," while "wearing female vestments," and, strange as it may seem, even shown sprouting an unmistakable beard.

Much worse than a beard, however, was the Neolithic representation of the goddess with a phallus for a head.¹⁰ This phallic Neolithic Virgin, as Marija Gimbutas referred to her,¹¹ was quite common throughout Europe,¹² including Greece.¹ Nor was this idiosyncrasy restricted to

H. Lewy, "Istar-Sad and the Bow Star," Studies in Honor of Benno Landsberger (Chicago, 1965), p. 273.

² Ihid.

³ M. A. van der Sluijs, "The Hero's Garment," AEON VI:3 (November 2002), p. 109.

⁴ W. Burkert, Greek Religion (Harvard University, 1985), p. 220.

⁵ S. Langdon, Semitic Mythology, Vol. V of C. J. A. MacCulloch (ed.), The Mythology of All Races (N. Y., 1931/1964), p. 44.

⁶ Ibid.

⁷ J. T. Dennis, *The Burden of Isis*, as cited by D. A. Mackenzie, *Egyptian Myth and Legend* (N. Y., 1907/1978), p. 27.

⁸ M. van der Sluijs, loc. cit.

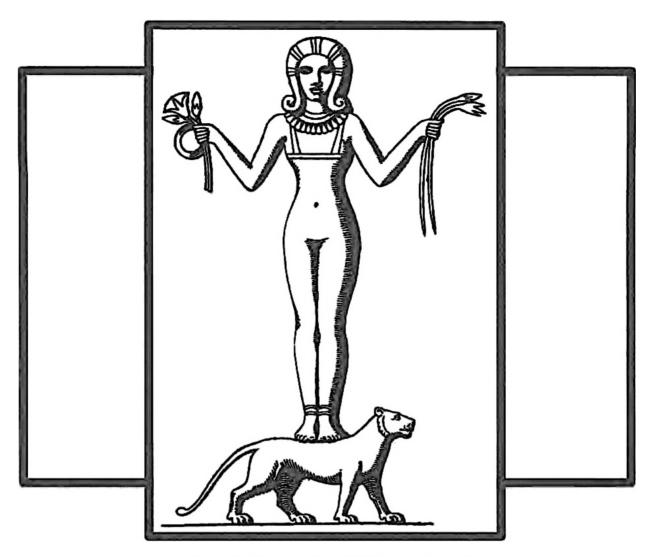
⁹ *Ibid.*. pp. 109-110

¹⁰ R. Hardie, "Gender Tension in Figurines in SE Europe," in D. A. Barrowclough & C. Malone, *Cult in Context: Reconsidering Ritual in Archaeology* (Oxford, 2007), p. 83

¹¹ M. Gimbutas, The Goddesses and Gods of Old Europe (London, 1982), p. 152.

¹² A. Marshak, The Roots of Civilization (N. Y., 1972), pp. 292-293.

¹ J. R. Rodden, "An Early Neolithic Village in Greece," Scientific American (April, 1965), p. 88.



Qudshu-the Egyptian form of the Canaanite Anath.

European cultic figurines. The Great Mother of the Kogi aborigines of Colombia is tagged with a native name that actually translates as Mother Penis.

THE HERMAPHRODITIC GOD

What some will definitely find more mystifying than the goddess' masculine gender will be the god's feminine character. This has already been intimated through the above-mentioned association of Anath with Yahweh as well as the identification of Ashtart with the same Semitic deity. And, as already noted, this becomes additionally enigmatic in view of our identification of Yahweh as the proto-Saturnian deity. Truth be told, however, Yahweh was not the only Saturnian deity that was presented as having been bisexual.

¹ G. Reichel-Dolmatoff, "The Great Mother and the Kogi Universe: A Concise Overview," *Journal of Latin American Lore*, Vol. 13, No. 1 (1987), p. 83.



Ishtar

Both Enki¹ and Ninurta were known to incorporate both male and female principles,² as so did one of the gods who were honored by the title of Ba'al.³ In fact, the very name of one of these Ba'als, or Baalim as they are more correctly rendered, was identical to that of the goddess Astarte.⁴

In Egypt's New Empire Isis was known as the "female Ra" as well as the "female Horus." Even the great Atum was made to refer to himself as the "great He/She."

¹ For Enki as Saturn see D. Cardona, God Star (Victoria, British Columbia, 2006), pp. 213, 225

² D. N. Talbott, The Saturn Myth (N. Y., 1980), p. 88.

³ G. R. Scott, *Phallic Worship: A History of Sex and Sexual Rites* as cited by M. A. van der Sluijs, "The Hero's Garment," *AEON* VI:3 (November 2002), p. 109.

⁴ M. Eliade, Patterns in Comparative Religion (London, 1996), p. 422.

¹ E. A. W. Budge, Osiris and the Egyptian Resurrection, Vol. II (N. Y., 1911/1973), p. 277.

² R. T. Rundle Clark, Myth and Symbol in Ancient Egypt (London, 1978), pp. 41, 80.



Coin from Gaza showing the double-headed Ashtart-Yaw which equates the goddess with Yahweh.

The very Greek Kronos, whose identity as Saturn is in no way contentious, was correctly presented in the *Great Magical Papyrus of Paris* as "Lord of the World" and the "First Father." Yet even there he was referred to as the "Man-Woman."

Mithras, or Mithra, whom we have already met, had also, much earlier than Roman times, been considered to have been bisexual.

"Early on, there seems to have been a feminine Mithra. Herodotus said the Persians used to have a sky-goddess Mitra, the same as Mylitta, Assyria's Great Mother. Lydians combined Mithra with his archaic spouse Anahita as an androgynous Mithra-Anahita, identified with Sabazius-Anaitis..."

Even when it comes to Hinduism, we come across the god Shiva who is said to have "a body" that was "semi-female." The Mahadevi, that is Great Goddess, known as Parvati, was known as both Shiva's wife and his Sakti. In Sanskrit, sakti means "power." But if Parvati was Shiva's power, she must have been one with Shiva/Saturn. And so we find out:

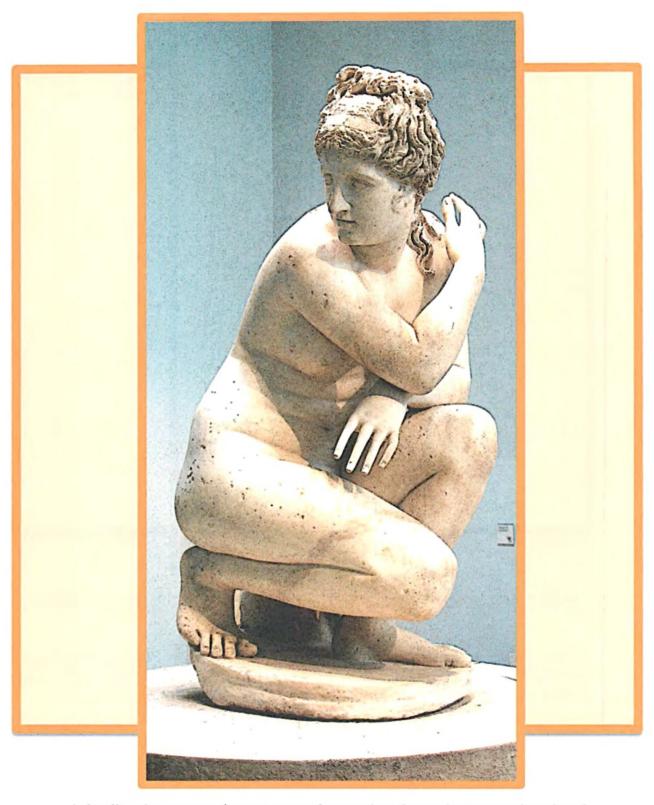
K. Preisendanz, Papyri Graecae Magicae: Die Griechischen Zauberpapyri, Vol. I (Berlin, 1928), p. 64.

² Ibid

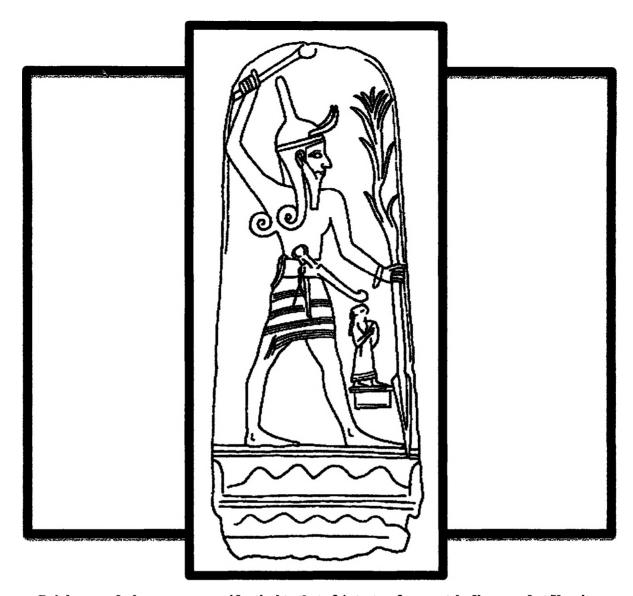
³ D. A. Leeming, The World of Myth (N. Y., 1990), p. 198.

⁴ Linga Purana, I: 1: 54: 65-68.

¹ P. Masson-Oursel & L. Morin, "Indian Mythology," New Larousse Encyclopedia of Mythology (London, 1972), p. 375.



Aphrodite who was sometimes represented as a male and even shown sprouting a beard. (Photograph by the author—courtesy of the British Museum, London, England.)



Ba'al—one of whose names was identical to that of Astarte—from a stele discovered at Ugarit, modern Ras Shamra.

(Illustration by Marie-Josèphe Devaux.)

"For the two spouses are in reality but one and the same person. Parvati, whatever the name she may bear, is only the *sakti*, the materialized energy of the god himself. Here we have the explanation of his [that is, Shiva's] androgynous portraits."

"Her [that is, Parvati's] complete identification with Shiva is emphasized in iconography by an image of Ardhanarisvara ('the god who is half woman'); the right half of the figure is a man's body and the left half that of a woman."²

¹ H. d Wilman-Grabowska, "Brahmanid Mythology," Asiatic Mythology (London, 1972), pp. 124-125.

² J. Herbert, "Hindu Mythology," in "India: The Eternal Cycle," Larousse World Mythology (London, 1972), p. 225; H. Zimmer, Myths and Symbols in Indian Art and Civilization (Princeton, 1974), p. 126.

To clinch the matter we also learn that one of the names bestowed on Shiva's wife—the Mahadevi Parvati—was actually also Shiva.¹

So, similarly, with Brahma who, in the Upanishads, is said to have appeared in female shape, and/or, according to the *Linga Purana*, as half woman and half man.³

It was no different across the ocean in the Americas. The Zuni Creator god whom we have already met under the name Awona-Wilona—sometimes rendered Awonawilona—was referred to as he-she,⁴ while the Aztec deity Ometeotl was also bisexual,⁵ and extolled in a Nahuatl hymn as both the father and the mother of the gods.⁶ Ndan, the head deity of the Zapotec, "sometimes appears as male, sometimes as female and sometimes as bisexual." Even the Mayan Itzam, the same as Itzamna and/or Itzam-Yeh, was regarded as both male and female by the Kekchi-speaking Maya of Guatemala.⁸

The Fon of Dahomey, in Africa, believe in a Creator who possessed a dual, androgynous, nature, as so, also, did the Hawaiians whose Creator, named Teave, was described as Father-Mother. Mother.

GOD ALMIGHTY GODDESS—FATHER MOTHER GOD

That God was a bisexual entity continued to be believed by the adherents of Gnosticism down into the third century of the present era. God's bisexuality is already mentioned in one of the most ancient of these texts, the *Poimandres*, that comes from the great collection of texts now known as the *Corpus Hermeticum*, attributed to Hermes Trismegistus. "I am the Mind," the deity is there made to state, "the first God, who existed before the watery substance appeared out of the Darkness." This Mind, however, is there proclaimed to be "both male and female." So, also, in the *Asclepius* from the same *Corpus Hermeticum*.

The "Father-Mother" aspect of God is also mentioned in *The Secret Book of John*, ¹⁴ as well as in *The Gospel of Truth*, ¹⁵ and in the *Trimorphic Protennoia*. ¹⁶

¹ W. D. O'Flaherty, *Hindu Myths* (Harmondsworth, 1976), p. 164.

² B. L. Kapoor, Gods of the High Hills (New Delhi, 2001), p.47.

³ Introduction to *The Linga Purana* by a "Board of Scholars," (Delhi, 1973), p. xxi.

⁴ D. A. Leeming, Mythology: The Voyage of the Hero (N. Y., 1998), p. 257.

⁵ H. W. Goodkind, "Lord Kingsborough Lost His Fortune Trying to Prove the Maya Were Descendants of the Ten Lost Tribes," *Biblical Archaeology Review* (September/October 1985), p. 64.

⁶ D. N. Talbott, op. cit., p. 114; M. A. van der Sluijs, *Traditional Cosmology*, Volume One (London, 2011), p. 83 & Volume Two, p. 44.

⁷ D. H. Kelly, "The Nine Lords of the Night," in J. A. Graham (editor), Studies in the Archaeology of Mexico and Guatemala, Volume 16 of the Contributions of the University of California, Archaeological Research Facility (Berkeley, 1972), p. 55.

⁸ *Ibid.*, p. 56.

⁹ M. J. Herskovits, *Dahomey*, Vol. II (N. Y., 1938), p. 129.

¹⁰ L. Melville, Children of the Rainbow: The Religions, Legends, and Gods of Pre-Christian Hawaii (Wheaton, Illinois, 1969), p. 18.

¹¹ W. Barnstone, The Other Bible (N. Y., 1984), p. 570.

¹² Ibid.

¹³ *Ibid.*, p. 581.

¹⁴ *Ibid.*, 61

¹⁵ *Ibid.*, p. 288

¹⁶ *Ibid.*, p. 591.



The four-headed Brahma who is said to have appeared in female shape or as half woman and half man.

The origin of the hymns contained in what has become known as *The Odes of Solomon* continue to be debated down into the present. As Willis Barnstone noted, "it is clear that they are based on Jewish hymnal tradition, that many of them have been subjected to a Christian overlay" while Gnostic references also abound within their stanzas. There are quite a few quotations from these odes that reappear in the works of the early Fathers of the Christian Church, especially since Christ is there presented as speaking to whosoever will listen."

Ode number nineteen from this collection is of special interest to the present work since it refers to the milking of the Father, that is God, by the Holy Ghost. As there described:

"The Holy Ghost opened the Father's raiment and mingled the milk from the Father's two breasts and gave that mingling to the world, which was unknowing."

Not surprisingly, all mention of God's two breasts and the milk they contained, not to mention their milking by the Holy Ghost, failed to penetrate Christian theology. And yet, even

¹ Ibid., p. 267

² *Ibid.*, p. 279.

in South American Christian countries such as Chile and Peru, shamanism continues to thrive in its most horrendous aspects, including human sacrifice. It is also obvious that certain shamanistic beliefs have been handed down through the ages, almost unscathed, from their original unfolding in primeval times.

What is said to supply some of the Mapuche tribal shamans with power is the form of their main totem, referred to as *rehue*. Despite the various forms it may take, a *rehue* stands for nothing less than a cosmic ladder,² one of various representations of proto-Saturn's plasmatic jet, the mythological *axis mundi*.³

As one of these shamans revealed, she could climb her *rehue* to a beautiful land, the Mapuche paradise, where God would be sitting as both man and woman. So, likewise, according to another shaman who said to have envisioned Une Fuche and Une Kuche, the Mapuche Father-Mother God, on Cerro Mesa.

FALLACIOUS INTERPRETATIONS

As with various other mythologists, Mircea Eliade could hardly fail to recognize that divine bisexuality "is an element found in a great many religions" and that "even the most supremely masculine or feminine divinities are androgynous." What he believed is that, despite the various forms under which the divinity is depicted, he or she represents ultimate reality and an absolute power that "will not let itself be limited by any attributes" such as good, evil, male, female, "or anything else."

It remains, however, doubtful that, in the primeval times with which we are concerned, humans could already have been capable of grasping the "theoretical, metaphysical significance" of what Eliade terms "the cosmological principle" that he presents as the basis for the deity's sexual duality.⁸

Somewhat earlier, Donald Mackenzie had offered an alternative interpretation: "Perhaps it was due to the monotheistic tendency, if not to the fusion of father-worshipping and mother-worshipping peoples, that bi-sexual deities were conceived of."

The problem with Mackenzie's explanation is that, as we have seen, belief in a hermaphroditic deity continued well beyond the monotheistic predilections of later times. In fact, as we have also noted, the bisexuality of the deity continued to be believed in by those who came to accept the unique individuality of God.

On the other hand, that father-worshipping people merged with mother-worshipping ones into a singular ethnic group is belied by the fact that no strictly father-worshipping or mother-

¹ P. Tierney, The Highest Altar (N. Y., 1989), in toto.

² *Ibid.*, pp. 114-115, 126-128, 131-132.

³ D. Cardona, Flare Star (Victoria, British Columbia, 2007), p. 274

⁴ P. Tierney, op. cit., p. 132.

⁵ *Ibid.*, p. 174.

⁶ M. Eliade, op. cit., p. 421.

⁷ Ibid.

⁸ Ibid.

⁹ D. A. Mackenzie, Myths of Babylonia and Assyria (London, 1915), republished as Mythology of the Babylonian People (London, 1996), p. 161.

worshipping communities are known to the exclusion of one from the other in all of antiquity. There is then Merlin Stone who, as noted in the following excerpt from one of her works, was absolutely sure that God had originally been a female deity before masculinity took over.

"In the beginning, people prayed to the Creatress of Life, the Mistress of Heaven. At the very dawn of religion, God was a woman."

As she also promulgated:

"The writers of the Judaic-Christian Bible, as we know it, seem to have purposely glossed over the sexual identity of the female deity who was held sacred by the neighbours of the Hebrews in Canaan, Babylon and Egypt. The Old Testament does not even have a word for 'goddess'. In the Bible the Goddess is referred to as Elohim, in the masculine gender, to be translated as god."²

I hope women, and even men, will not think of what follows as being discriminatory, but I have to say that Stone is not all that correct in what she claims. I will allow her that masculinity did come to predominate, not only in the Judeo-Christian faith, but in that of most other religions throughout the modern world.

That, at the very dawn of religion, God was a woman, however, cannot be validated since, as indicated in the very first volume of this series, the deity was originally phallic in nature. In other words, he was thought to have been provided with a penis.³

Fair enough, as above noted, the great goddess was also known to the Kogi as Mother Penis, but that marks *her* as a male deity, rather than marking God as a female one. There is, of course, much more to it, but, in order to avoid confusion, let us temporarily leave it at that.

What is true is that the Old Testament does not have a word for "goddess," but then neither does it really have a word for "God," since what has been rendered "God" is mainly Elohim, or El, when not Yahweh, all of which are proper names and not the noun that the word "God" connotes. It is only in translations from the original Hebrew that these proper names have been rendered as "God" and/or "the Lord."

Even so, goddesses are not only mentioned in the Old Testament, but, in some cases even honored above God, such as when the Hebrews refused to hearken to Jeremiah's call to revere the Lord while continuing to adore the Queen of Heaven who had been worshipped in ages past by the populace of Judah including its various kings and princes.⁴

On the other hand, that "Goddess" is there rendered "Elohim" needs clarification. That Elohim is the plural of the god known as El or Eloah is well known. This is what is known as the "majestic plural" that is used "to confer status or majesty" on whoever it is applied to.

¹ M. Stone, The Paradise Papers: The Suppression of Women's Rites (London, 1977), p. 17.

² Ibid., p. 7.

³ D. Cardona, God Star (Victoria, British Columbia, 2006), pp. 443 ff.

⁴ Jeremiah 44: 16-25.

⁵ J. Strong, Hebrew and Chaldee Dictionary (Madison, N. J., 1890), p. 12.

⁶ D. M. Rohl, A Test of Time: The Bible—From Myth to History (London, 1995), p. 228.

As a secondary majestic designation, "Elohim" is also applied as a noble title to magistrates, judges, and other officers of the state. In like manner it is twice used in the Old Testament—and only twice—as an honorable designation of the goddess Ashtoreth.

What is nonetheless not generally known among both Jews and Christians is that the Israelite belief in only *one* god received its unique status during the Babylonian exile.³ It was then that Yahwism was adapted to the conditions of the Israelites—Judahyites, actually—who were exiled in Babylonia.⁴ And, to be sure, it was then in that very country during that very exile that redactors re-edited and republished what eventually became known as the Old Testament.⁵ It was from then on that the goddess, as well as other gods, became anathematic

Despite all that, we are still left with an ambiguity. As we have amply documented, the hermaphroditic gods discussed above are all identifiable as the proto-Saturnian deity. Should the androgynous goddess, therefore, be likewise identified? Was not Anath and Ashtart, in fact, identified as the feminine aspect of Yaw or Yahweh? Was the proto-Saturnian deity originally a goddess rather than a god? This is a subject that has confused quite a few mythologists, which confusion had earlier also trapped the present writer. Let us then get rid of this equivocality and set the record straight.

¹ J. Strong, loc. cit.

² I Kings, 11: 5, 33.

³ A. Lemaire, "The Universal God: How the God of Israel Became a God for All," *Biblical Archaeology Review* (November/December 2005), p. 57.

⁴ *Ibid*., p. 59

⁵ Ibid.; see also K. van der Toorn, Scribal Culture and the Making of the Hebrew Bible (Cambridge, Maryland, 2007), in toto.

Chapter 21

Dea Cælestis

THE MOTHER GODDESS

certain amount of confusion abounds among mythologists concerning what has become generally known as the Mother Goddess, to which confusion, as already noted, I myself had fallen victim. Needless to say, the main problem with this deity concerns her identity. Although it has been difficult for mythologists to come to a firm conclusion concerning who, or what, she actually personified, the tight grip she held among her worshippers came close to eclipsing that of God. In fact, it can actually be said that, as far as Christians are concerned, her grip has in no way diminished. To quote Ev Cochrane:

"If her cult is no longer as all-pervasive as it once was, it is still very much alive, having been gradually sublimated and assimilated into countless niches of modern religious experience. It is well known, for example, that various aspects of the mother goddess' cult have been absorbed by the worship of the Virgin Mary."

Robert Graves, whom Cochrane cites, was right on the ball when he stated that the Mother Goddess not only remains "deeply fixed" in racial memory, but its inexorable hold is "impossible to exorcize."²

Fair enough, matters are not as bad as they once were in this respect, and yet it is surprising to what extent the primordial Goddess, as distinct from the Virgin Mary, continued to hold sway down into modern times. Thus, for one thing, the Goddess was responsible for the inauguration of sexual ceremonies that, despite their obvious sinful obscenity, failed to shock Christian moralities. Aurelius Augustinus, born in Algeria when it was still a Roman province during the fourth Christian century, could not have been exaggerating when he described these rituals. Although he later became the bishop of Hippo Regius, present-day Annaba in Algeria, and turned himself into such a consummate theologian that earned him the sanctification of the Christian Church, he displayed no qualms about confessing to have attended such rites when he was still a young man. As he himself declared, he actually took pleasure in what he described as the shameful celebrations in honor "of the virgin Cælestis, and Berecynthia," now better known as Tanit and Rhea or Cybele. As he went on:

"And, accordingly, the lewd actions and filthy words with which these players honoured the mother of the gods, in presence of a large assembly and audience of both sexes, they could not for very shame have rehearsed at home in presence of their own mothers."

¹ E. Cochrane, "Aphrodite Urania," AEON, Vol. V. No. 2 (April 1998), p. 43.

² R. Graves, The White Goddess (N. Y., 1948), p. 482.

³ Aurelius Augustinus, De Civitate Dei, II:4.

⁴ Ibid.

Concerning which, he asked: "If these are sacred rites, what is sacrilege?" And: "If this is purification, what is pollution?"

And it goes on because the primeval Mother Goddess continues to be worshipped by various spiritual groups that congregate *en masse* in places where the Goddess had held power in ancient times. Such a place is the prehistoric complex of Çatal Hüyük—variously transliterated—concerning which Ian Hodder wrote:

"...groups on Goddess tours regularly visit the site from the USA, Germany, Istanbul and elsewhere. They come to pray, hold circle dances, feel the power of the Goddess. There is a great diversity of such groups from Gaia groups, to Ecofeminists, to Goddess New Age travelers. Individuals are often visibly moved by the experience of visiting and it is undoubtedly the case that for many the existence of the Goddess at Çatalhöyük is important for their personal sense of identity."

All of which is not anywhere half as bad as the gruesome Aztec ceremony that was held in honor of Toci, the Mother of the Gods. As described by the Franciscan missionary priest, Bernardino de Sahagún, a woman was chosen to represent the Goddess who, after having been honored and feasted for several days, was taken at midnight to the top of a temple where she was beheaded while perched on the shoulders of a man. Her body was then flayed and her skin was donned by a priest, while that of the woman's thigh served separately as a mask worn by a younger man who represented Cinteotl, the son of the goddess Toci.³

Another gruesome ceremony, involving mass human sacrifice, was also held in honor of the goddess known as White Woman by the Natchez Amerinds.⁴

And yet, who, or what, did this Mother Goddess represent?

It is in attempting to answer that question that the trouble starts since, to be sure, the goddess has been identified as so many different entities concerning which no unanimity has ever been achieved among mythologists.⁵ To once again quote Cochrane:

"Indeed, it is the extraordinary diversity in the mother goddess' cult which militates against the prospect that a common denominator can be found which will satisfactorily define the goddess in each of her numerous manifestations."

While we shall be discussing the misconceptions concerning the identity of the Mother Goddess independently, we shall here compare them to what mythologists have offered in relation to Isis, the Egyptian Mother Goddess par excellence.

We begin with the peculiar claim, forwarded by Charles McDowell on the basis of

¹ Ibid.

² I. Hodder, The Leopard's Tale (London, 2006), p. 208

³ J. G. Frazer, The Golden Bough: The Roots of Religion and Folklore (N. Y., 1890/1981), Vol. II, p. 220.

⁴ J. A. Maxwell, et al., America's Fascinating Indian Heritage (N.Y., 1978), pp. 72-73.

⁵ See, for instance, A. Baring & J. Cashford, The Myth of the Goddess (London, 1993), in toto.

⁶ E. Cochrane, op. cit., p. 44.

Diodorus Siculus, that Osiris was actually a real-life king, that would make his wife Isis just as much a real-life queen, of ancient Egypt.²

Somewhat later than Diodorus, the Greek historian Plutarch had it recorded that there were those who regarded Isis as having been "none other than the Moon."

Immanuel Velikovsky entertained a different concept, that was later taken up by some of his adherents, in which Isis is presented as having originally embodied the planet Jupiter.⁴

Isis has also been equated by the Egyptians themselves with the star they named Sopdet, the Greek Sothis, that is now believed to have been Sirius, also known as the Dog Star, the brightest star that is presently visible in the night sky. So, in fact, is the goddess represented in various depictions that still exist in the ruins of ancient Egyptian monuments.

The knighted British astronomer Joseph Norman Lockyer was not content with having Isis personify only Sirius since, according to him, she was also identified with various other stars, including Antares and Alpha Columbae. With so many different stellar identities, Lockyer was finally moved to state that Isis originally stood for "anything luminous" that appeared in the eastern sky. And, not being happy with all that, Lockyer even thought of presenting the same Isis as the personification of the dawn and even twilight. In that much, at least, he was not alone. It

Isis was also associated with the sea and called the mistress of the winds.¹² She was said to have invented the sail, which she is sometimes shown holding, and thus became the protector of seafarers.¹³

As if all that is not enough, the goddess is additionally believed to have personified the Earth.¹⁴ It is, perhaps, mostly in this that Isis can be said to be comparable to other deities that

¹ Diodorus Siculus, Bibliotheca Historica, I: 16.

² C. McDowell, "The Egyptian Prince Moses," in M.A. Luckerman (Executive Editor), *Proceedings of the Third Seminar of Catastrophism and Ancient History* (Los Angeles, 1986), p. 3.

³ Marinus (writing under the name Rens) van der Sluijs, "Gods in the Flesh—Part Two," thunderbolts.info/tpod (March 25, 2008), p. 2.

⁴ I. Velikovsky, "On Saturn and the Flood," KRONOS, Vol. V, No. 1 (Fall 1979), pp. 4, 6; idem, Mankind in Amnesia (N. Y., 1982), p. 99; S. H. Mage, et al., "Sothic Dating Redux," KRONOS, Vol.VI, No. 4 (Summer 1981), p. 90.

⁵ J. N. Lockyer, The Dawn of Astronomy (Cambridge, Mass., 1894/1973), pp. 196, 200, 210; M. O. Howey, The Cults of the Dog (Rochford, Essex, England, 1972), p. 50; R. T. Rundle Clark, Myth and Symbol in Ancient Egypt (London, 1878), p. 188; J. N. Sammer, "Venus and Sirius," KRONOS, Vol. Vi, No. 1 (Fall 1980), p. 71; J. D. Weir, "The Great Pyramid," Chronology and Catastrophism Review (XVI, 1994), p. 60; E. C. Krupp, Skywatchers, Shamans & Kings (N. Y., 1997), p. 289.

⁶ E. C. Krupp, Beyond the Blue Horizon (N. Y., 1991), pp. 26, 28, 217, 219; P. James, et al., Centuries of Darkness (New Brunswick, N.J., 1993), p. 226.

⁷ J. N. Lockyer, op. cit., p. 287.

⁸ *Ibid*., pp. 289, 294.

⁹ *Ibid.*, p. 292.

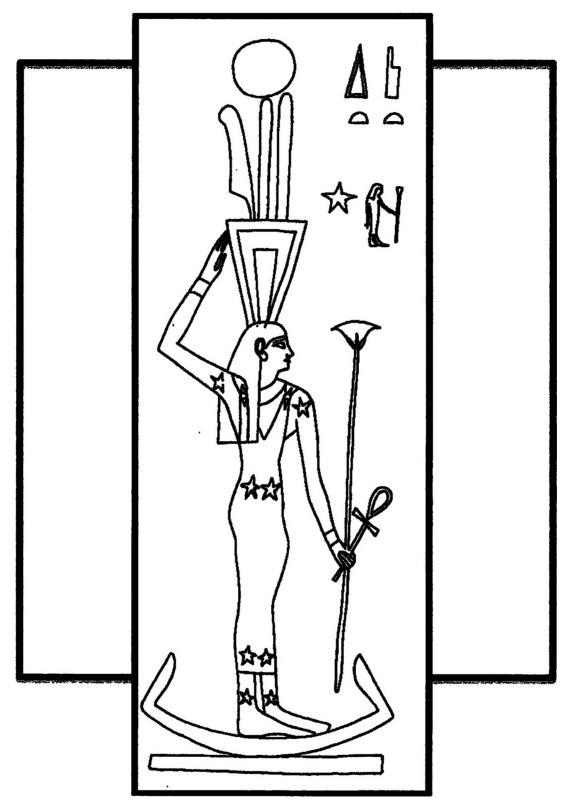
¹⁰ *Ibid.*, p. 29.

¹¹ See, for instance, T. W. Doane, Bible Myths and Their Parallels in Other Religions (N.Y., 1882), p. 476.

¹² G. Vikan, "Don't Leave Home Without Them: Pilgrim Eulogia Ensure a Safe Trip," *Biblical Archaeology Review* (July/August 1997), p. 58.

¹³ Ibid.

¹⁴ T. W. Doane, op. cit., p. 477.



Isis in her identity as the star Sirius. (Illustration from an Egyptian tomb.)

have been identified as the Mother Goddess. As David Leeming noted: "In ancient times the archetype that we refer to as the Great Mother seems likely to have been primarily an earth mother—that is, a personification of Earth itself." And that, according to Jacquetta Hawkes, goes as far back as Sumer, the earliest civilization we presently know of, where Ninhursag, also known as Ninnah and even Nintu, represented the great Mother. Despite her various identities, that is what most mythologists believe the Mother Goddess to have actually represented, when her personalities, such as the Greek Diana and the Babylonian Ishtar, are not directly stated to have represented the Mother of the World.

To be sure, this belief did not relate only to far eastern countries. Thus, for instance, to quote Shahrukh Husain:

"Among the most widely revered of Celtic deities were a range of powerful female figures who embodied the earth...Shrines, statues and inscriptions to these mother goddesses have been discovered all over the Celtic world. They play an important role in Irish and Welsh mythology."

In that respect, it is additionally interesting that the goddess' name of Eire is what gave the land we now know as Ireland its original name. What is even more important than that, however, is how often the word "ma" appears as part of the name bestowed on some of these goddesses. And this, too, goes all the way back to the earliest civilizations, as in the Babylonian goddess known as Mama, or Mami, as well as Mamitu or Mammitu, all derived from Ama meaning "mother". And even there these names go back to some of the earliest literature these civilizations had to offer. Thus, for instance, Mami is to be found in the Enuma Elish, known among mythologists as the Babylonian Creation Epic, while Ma, sometimes rendered Mah, is mentioned in the Epic of Gilgamesh. Even among tribes of Asia Minor, the Mother Goddess was worshipped under the name of Ammas, as also Ma. And so, too, among the Bantu-speaking tribes of Africa who knew the goddess as Ninavanhu-Ma. In fact, as has been noted, "the word for mother in almost all languages across the globe

¹ D. A. Leeming, The World of Myth (N. Y., 1990), p. 134.

² J. Hawkes, The First Great Civilizations (N. Y., 1973), p. 190.

³ See, for instance, S. H. Langdon, Semitic Mythology, Vol. V of C. J. A. MacCulloch (ed.), The Mythology of All Races (N. Y., 1931/1964), p. 12; H. Lewy, "Origin and Significance of the Mågen Dåwîd," Archiv Orientalnt, 19, Pt. 3 (1950), p. 337; R. Briffault, The Mothers (N. Y., 1963), in toto.; D. A. Mackenzie, Egyptian Myth and Legend (N. Y., 1978), p. 258; A. Yoshida, "The Origin of the Earth-Mother Cult in Europe and Japan," in Y. Yasuda (ed.) Forest and Civilisations [sic.] (New Delhi, 2001), pp. 123 ff.

⁴ F. Elworthy, *The Evil Eye* (N. Y., 1895/1971), p. 193.

⁵ S. Husain, "Gods, Goddesses and the Cosmos," in P. Bently (Ed.), Heroes of the Dawn (London, 1996), p. 23.

⁶ D. Kenny, "A Celtic Destruction Myth: Togail Bruidne Da Derga," in A. L. Luckerman (ed.), *Proceedings of the Third Seminar of Catastrophism and Ancient History* (Los Angeles, California, 1986), p. 62.

⁷T. G. Pinches, *The Religion of Babylonia and Assyria* (London, 1906), p. 94.

⁸ A. Heidel, The Babylonian Genesis (Chicago, Illinois, 1942), pp. 54-55

⁹ S. H. Langdon, op. cit., pp. 220, 221,

¹⁰ D. A. Mackenzie, Egyptian Myth and Legend (N. Y., 1907/1978), p. 258.

¹¹ C. Marchesi, "Ancient Myths and Legends of the African Bantu People," *The Velikovksian*, Vol. III, No. 1 (1997), p. 88.

incorporates 'ma' in some form," and this, whether correctly or not, is now assumed to mean that the word "is the remnant of a once-universal base language from which all others derive." To us, it is even more important to find out why the Goddess was referred to as a mother, or, better still, why the deity in question was considered feminine.

In the end, however, nothing about the Mother Goddess will ever make sense unless we can determine what she actually represented. Before that, however, we must also delineate what she did *not* represent.

RECTIFICATIONS

That Isis was a real-life queen is not accepted by most—one would almost say by all—mythologists since there is so much in her myths and legends that speaks against such an identity.

Her characterization as the Moon is more valid. It should, however, be noted that this concept rose very late in Egyptian religion³ so that it cannot really shed any light—pun not intended—on her origin.

That Isis personified the planet Jupiter was only held by Velikovsky, but, despite the need he had for that identity to bolster his specific mytho-historical reconstruction, he never presented a single piece of evidence in its favor.

With the exception of Sothis/Sirius, which shall be discussed further down, Lockyer's identification of Isis as various stars and all things luminous in the eastern sky, as well as dawn and twilight, was so wishy-washy that even Giorgio de Santillana, despite his own idiosyncrasy, was moved to state that it could only "breed uneasy diffidence" among other mythologists including Lockyer's own admirers.⁴

There is then Isis' association with the sea, the invention of the sail, and her protection of seafarers, but this, too, stems from the later Ptolemic period of Egyptian history⁵ and, very much like her identification as the Moon, cannot help in identifying who or what the goddess originally personified.

As already indicated, Isis' characterization as the Earth was in common agreement with the Mother Goddesses of almost all other ancient civilizations. And, as also already noted, this goes as far back as the Sumerian Ninhursag who was also known as Ki, which name simply meant "Earth." We need not remind our readers, however, that, as far as our ancient forefathers were concerned, there was once a cosmic entity besides our world that can best be described as a *celestial* Earth, which brings us back to the proto-Saturnian deity. In fact, as David Talbott ably noted, "the great mother is inseparable from Saturn's 'body'."

¹ D. Souden, Stonehenge Revealed (N.Y., 1997), p. 60.

² Ihid

³ M. Bernal, Black Athena, Vol. I (New Brunswick, 1988), p. 95.

⁴ G. de Santillana, Preface to the 1973 edition of J. N. Lockyer's *The Dawn of Astronomy* ((Cambridge, Mass.) p. viii.

⁵G. Vikan, loc. cit.

⁶ J. Hawkes, loc. cit.

⁷ See back to pages 139 ff., 175 ff., 180.

⁸ D. N. Talbott, The Saturn Myth (N. Y., 1980), p. 80.

What Talbott meant by Saturn's "body" was the very enclosure that proto-Saturn's spiraling debris ended up forming around it in conjunction with its diminished circumstellar disk. As George Stanley Faber, whom Talbott cites, indicated, the Goddess "appears as a protective enclosure sheltering the great father." All of which led me to conclude that the Mother Goddess had to have been the feminine aspect of the Saturnian deity. At this later date I do not mind admitting that my continuing research through the years eventually led me to realize that I was actually wrong in that assumption. A direct connection between the Mother Goddess and the proto-Saturnian deity cannot be denied, but the goddess was not the same entity as the god. Even so, was she, at least, as Talbott claimed, the ring or band around the proto-Saturnian god? Let us dig deeper.

DILBAT

What is also of great interest, as we have additionally noted, is the Egyptians' identification of Isis, and even Hathor,³ as the star Sothis. This was so important to the ancients that the Jewish historian Flavius Josephus could refer to Egypt as "the land of Siriad" that was a reference to the Dog Star that was Sirius.⁴ But even that is not as straightforward as it may seem. For one thing, as some mythologists have indicated, the name Sirius, which is what Sothis is believed to have represented, once belonged to a very different heavenly body that had been situated in Earth's north celestial pole.⁵ Not only that but, as indicated in "the so-called Dilbat tablet" from Sumer, the star Sirius used to be invoked during prayers as a surrogate for Dilbat during those periods when Dilbat was not visible in the sky.⁶ And Dilbat was the Sumerian astronomical name of the planet Venus.⁷

For those who do not yet know the answer, the question then becomes: Could the Mother Goddess have been the planet Venus and, if so, what would Venus have had to do with Earth's primordial proto-Saturnian stellar host?

INANNA

Despite his specious affirmations concerning the luminosities he associated with Isis, Lockyer was correct in his conclusion that many—we would actually say most—of the names of Egyptian goddesses turn out to be what he called "pure synonyms" of each other. In other words, as he wrote, "we have the same goddess...called different names in different places." This synonymy, if one wishes to call it that, however, did not merely entail Egyptian goddesses but those from all over the ancient world. As Frederick Elworthy noted, "her names are innumerable," among which he noted the following: Ri, Alitta, Elissa, Beltis,

¹ *Ibid.*, 82.

² D. Cardona, "The Road to Saturn," Part II, AEON, Vol. I, No. 3 (May 1988), p. 126.

³ M. O. Howey, *The Cults of the Dog* (Ashingdon, England, 1972), p. 50.

⁴ *Ibid.*, p. 48.

⁵ W. F. Warren, *Paradise Found* (Boston, 1885), p. 252.

⁶ H. Lewy, "Ištar-Såd and the Bow Star," Studies in Honor of Benno Landsberger (Chicago, 1965), pp. 275-276.

⁸ J. N. Lockyer, op. cit., p. 289.

⁹ Ibid.

Ashtoreth, Astarte, Saraha (or Sara), Nana, Asurah, and Tanith (variously spelled). "All these and more are Babylonish [that is of Babylonian origin]," he wrote, "but elsewhere she is Athor, Dea, Syria, Artemis, Aphrodite, Rhea, Demeter, Ceres, Diana, Minerva, Juno, Venus, Isis, Cybele, Ge [or Gaea, and] Hera." In other words, just about every major goddess that was worshipped in dim antiquity.

And yet, even in all of that, the real identity of the Goddess remains nothing but a confused mish-mash of opinions among most mythologists some of whom have unfortunately proposed that the Greek representatives owe their near-identical characteristics to mergers between once-separate religious sects. Thus, to quote Alexander Murray:

"It has been suggested with much plausibility that a number of [Greek] deities, [such] as Dione, Hera, Gaea, and Demeter, resemble each other so much as to warrant the reasonableness of the conclusion that their separate existence in the mythology was due to a coalescence at some remote early time of distinct tribes of the Greek race, with separate names and slightly different attributes, though in the main capable of identification and a common worship."

This proposition, to be sure, was not meant to refer only to Greek goddesses. As Mircea Eliade stated: "Every goddess tends to become a Great Goddess, taking to herself all the attributes and functions that belong to the archetypal Great Goddess."

One of these typical Great Goddesses to whom we shall now turn our attention is the Sumerian Inanna. Scholars, including the renowned Thorkild Jacobsen and Samuel Kramer, as Cochrane noted, have been led to suppose that her cult represented "a jumble of contradictions" that resulted through her derivation from several different deities that preceded her in antiquity.⁵ So, similarly, according to the British archaeologist Jacquetta Hawkes when she claimed that Inanna "must have usurped some of the attributes and functions of the ancient Mother Goddess." As we shall be indicating, however, Inanna was one and the very same original Mother Goddess, as so, also, were the great majority of goddesses from other ancient civilizations.

The antiquity of Inanna's cult is evidenced by offerings to the goddess in temples, the remains of which have been excavated in the Sumerian city of Uruk that has been dated to 3000 B.C.⁷ The inordinate importance of her cult is indicated by the fact that offerings to her far outnumbered the ones made to other deities, even if her femininity did not elevate women in general to the same ideological position.²

¹ F. Elworthy, op. cit., p. 226.

² Ibid.

³ A. S. Murray, *Manual of Mythology* (N.Y., 1950), p. 5 (emphasis added).

⁴ M. Eliade, Patterns in Comparative Religion (London, 1996), p. 462.

⁵ E. Cochrane, The Many Faces of Venus (Ames, Iowa, 2001), p. 20.

⁶ J. Hawkes, The First Great Civilizations (N. Y., 1973), p. 191.

⁷ E. Cochrane, op. cit., p. 16.

¹ Ibid.; idem, Starf*cker: The Catastrophic Conjunction of Venus and Mars (Ames, Iowa, 2006), p. 19.

² S. Pollock, Ancient Mesopotamia: The Eden that Never Was (Cambridge, 2004), p. 192.



Inanna, displaying her asterisk-like emblem, on a plaque from Arbela.

One of the earliest symbols denoting the goddess Inanna resembled a modern asterisk. That this was meant to identify her as a celestial body is now beyond doubt. But, more than that, as Cochrane noted, "this particular determinative seems to have been reserved for astral deities in the earliest period." Thus, as far as Krystyna Szarzynska, whom Cochrane quotes, is concerned, "the beginning of the cult of astral deities reaches back to the proto-Sumerian period, perhaps even earlier."

To be sure, Inanna's early identification as an astral body is evidenced by some of the hymns that honor her from this early period in which she is referred to as "the luminary of heaven" and "the strange star." In yet another hymn, the Goddess is referred to as "Inanna of

¹ E. Cochrane, "The Female Star," AEON (December 1998), p. 53 (emphasis added).

² Ibid., p. 54; P. Beaulieu, The Pantheon of Uruk During the Neo-Babylonian Period (Leiden, 2003), p. 104.

¹ J. Klein, "The Birth of Kingship: From Democracy to Monarchy in Sumer," Archaeology Odyssey (January/February 2001), p. 22.

² I. Fuhr, "On Comets, Comet-Like Luminous Apparitions and Meteors," (Concluded), KRONOS (Fall 19821), p. 44.

the place where the sun rises," while, elsewhere, she is also associated with the setting Sun.² It is almost redundant to state that the star that appears in the two distinct places where the Sun rises and sets happens to be the planet Venus.

That Inanna—Ninanna and/or Ininni—represented the planet Venus has been documented by various mythologists,³ including Stephen Langdon,⁴ even if contested by some of them. In fact, despite the reproaches by critics that the association of ancient deities with the planets stems from "later" times,⁵ the identification of Inanna as the planet Venus, as Wolfgang Heimpel noted, is not only apparent in all historical periods, but goes all the way back to prehistoric eras.⁶ As he pointed out, that identification is amply borne out by astronomical and astrological texts from the earliest periods of cuneiform inscriptions.⁷ And so, also, with the Viennese professor of archaeology Gebhard Selz.⁸

Inanna was known by various other names such as Gula, Bau, and Nanaya, that was again the planet Venus. But, most of all, she was one and the same as the Babylonian, but also Akkadian and Assyrian, goddess known as Ishtar and/or Ishara, as indicated in the story of Etana, and other tablets that have come to light at Tell Mardikh, that is ancient Ebla, in Syria. In fact, the goddess is often referred to by mythologists as Inanna/Ishtar, to whom we shall now turn our attention.

THE QUEEN OF HEAVEN

The high esteem to which Ishtar was held can be demonstrated through one of her hymns in which her worshippers are made to state:

"To thee I cry, O lady of the gods, Lady of ladies, goddess without peer, Ishtar...Adored art thou in every sacred place,

¹ A. Sjoberg & E. Bergmann, *The Collection of the Sumerian Temple Hymns* (Locust Valley, N. Y., 1969), pp. 89-90.

² P. J. Huber, "Early Cuneiform Evidence for the Existence of the Planet Venus," in D. Goldsmith (ed.), Scientists Confront Velikovsky (Ithaca, N. Y., 1977), pp. 120-121; ² E. C. Krupp, op. cit., p. 193.

³ B. Alster, "On the Interpretation of the Sumerian Myth 'Inanna and Enki'," Zeitschrift fur Assyriologie, Vol. 4 (1975), pp. 28-29; E. Cochrane, "Venus in Ancient Myth and Language," AEON, Vol. I, No.1 (1988), p. 37.

⁴ S. H. Langdon, op. cit., pp. 108-109.

⁵ See here, for instance, C. L. Ellenberger as quoted in D. Cardona, *Metamorphic Star* (Oregon, 2011), p. 31; M. A. van der Sluijs, "Gods and Planets," *Chronology & Catastrophism Workshop* (2003:1), p. 14; V. Clube & B. Napier, as quoted by M. M. Mandelkehr, "The Comet Wasn't Venus," *Chronology & Catastrophism Review* (1992 XIV), p. 37.

⁶ W. Heimpel, "A Catalog of Near Eastern Deities," Syro-Mesopotamian Studies, Vol. 4, No. 3 (1982), pp. 10-12.
⁷ Ibid., p. 10.

⁸ G. H. Selz, "Five Divine Ladies," NIN, Vol. 1 (2000), p. 30.

⁹ S. H. Langdon, op. cit., p. 110; D. Ragavan, "Entering Other Worlds: Gates, Rituals, and Cosmic Journeys in Sumerian Sources," in D. Ragavan (ed.), Heaven on Earth: Temples, Ritual, and Cosmic Symbolism in the Ancient World (Chicago, 2013), p. 211.

¹⁰ S. H. Langdon, op. cit., pp. 326; E. Cochrane, "Heracles as Cross-Dresser," AEON (August 2003), p. 50.

¹¹ S. Dalley, Myths From Mesopotamia (Oxford, 1991), p. 190.

¹² P. Matthiae, Ebla: An Empire Rediscovered (London, 1980), pp. 178-179.

In temples, holy dwellings, and in shrines, Where is thy name not lauded?"¹

It was not without reason that the goddess received the deific title of Queen of Heaven² and similar designations such as "world queen," "sovereign of the sky," "glory of heaven," and similar others. As we have already seen, it was to the Queen of Heaven that the Hebrews hearkened to, despite the prophet Jeremiah's call to forsake her and turn instead to Yahweh. As we have also seen, bread and/or cakes were baked into the shape of the goddess of grain and/or wheat and consumed in sacramental fashion. Thus a clay cake or bread container with the figure of a naked female molded into it that was found at Mari, modern Tell Hariri, Syria, is believed to have represented Ishtar. King Nebuchadnezzar II was so taken up with the goddess that he dedicated the eighth gate of the city of Babylon to her, which entrance became known as the Ishtar Gate.

As he did with Isis, Velikovsky claimed that Ishtar originally personified the planet Jupiter, but, also as with Isis, he never presented any valid evidence in its favor. One thing for sure is that, in old Assyriaan texts, Ishtar is termed kakkubum, which means "star"—kowkab in Hebrew, kaukab and/or kokab in Arabic, kewkba in Maltese (although stilla, from the Latin stella, is also used: see more below). In that respect Ishtar was also hailed as the "light divine," but, more than that, she was also equated with the dual role inherent in the morning and evening star. Thus, in one Assyrian hymn, she is quoted as saying: "Ishtar, the goddess of the morning, and Ishtar, the goddess of the evening, am I." That this identifies her as the goddess of the planet Venus has long been understood.

¹ D. A. Mackenzie, Myths of Babylonia and Assyria, republished as Mythology of the Babylonian People (London, 1915/1996), p. 18.

² S. H. Langdon, op. cit., p. 25; idem, Sumerian and Babylonian Psalms (Paris,1909), p. 188; D. A. Mackenzie, op. cit., p. 106.

³ D. A. Mackenzie, op. cit., p. 18

⁴ S. H. Langdon, op. cit., pp. 192-193.

⁵ See here, for instance, M. L. Suring, The Horn-Motif in the Hebrew Bible and Related Ancient Near Eastern Literature and Iconography (Andrews University Press, 1980), pp. 35-36.

⁶ Jeremiah 44: 16-25.

⁷ H. Shanks & A. Malamat, "The History Behind the Bible," *Biblical Archaeology Review* (January/February 2003), p. 44.

⁸ L. E. Rose (transcriber), "Transcripts of the Morning and Evening Sessions of the A.A.A.S. Symposium on 'Velikovsky's Challenge to Science' Held on February 25, 1974," in D. A. Pearlman (ed), Stephen J. Gould and Immanuel Velikovsky (Forest Hills, New York, 1996), p. 739.

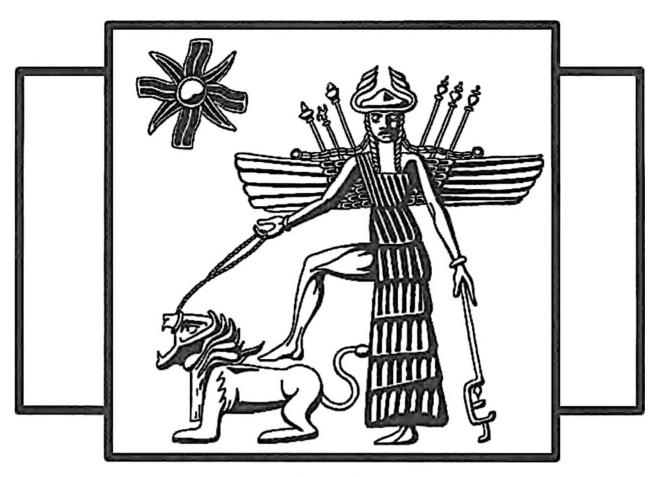
⁹ H. Lewy, op. cit., p. 274

¹⁰ D. A. Mackenzie, op. cit., p. 18.

¹¹ S. H. Langdon, Semitic Mythology, Vol. V of C. J. A. MacCulloch (ed.), The Mythology of All Races (N. Y., 1931/1964), p. 24; E. C. Krupp, op. cit., pp. 193, 194.

¹ C. Flowers, et al., Mysteries of the Bible (N. Y., 1988), p. 246.

² G. Rawlinson, The Seven Great Monarchies of the Ancient Eastern World, Vol. I (N. Y., 1885), p. 90; F. Guirand, "Assyro-Babylonian Mythology," New Larousse Encyclopedia of Mythology (London, 1972), p. 58; W. F. Albright, From the Stone Age to Christianity (N. Y., 1957), p. 370; P. Amiet, "The Mythological Repertory in Cylinder Seals of the Agade Period," in E. Porada (ed.) Ancient Art in Seals (Princeton, 1980), p. 46; W. Heimpel, loc. cit.; E. C. Krupp, op. cit., p. 194.



Ishtar—with her emblematic star.
From a cylinder impression of the Neo-Assyrian Period.

There is also good evidence that, at least in Elam, in what is now Iran, Ishtar represented the Bow Star. Because this star is a member of the constellation known as Alpha Canis Majoris, that is the Big Dog, the Bow Star was also known as the Dog Star. The star in question is now better known as Sirius.

The identification of Ishtar as the star Sirius is just as well known,³ and just as often commented upon,¹ as her representation of the planet Venus. And this has absolutely nothing to do with the hypotheses that are entertained by modern mythologists. In fact, as far back as the sixth century B.C., the Assyrian king Ashurbanipal was already celebrating the feast of Ishtar at the rising of the Bow Star/Sirius.² But, as we have already seen in the case of Dilbat, Sirius merely played surrogate to Venus during prayers and/or festivities when Venus was absent from the sky. As Hildegarde Lewy explains:

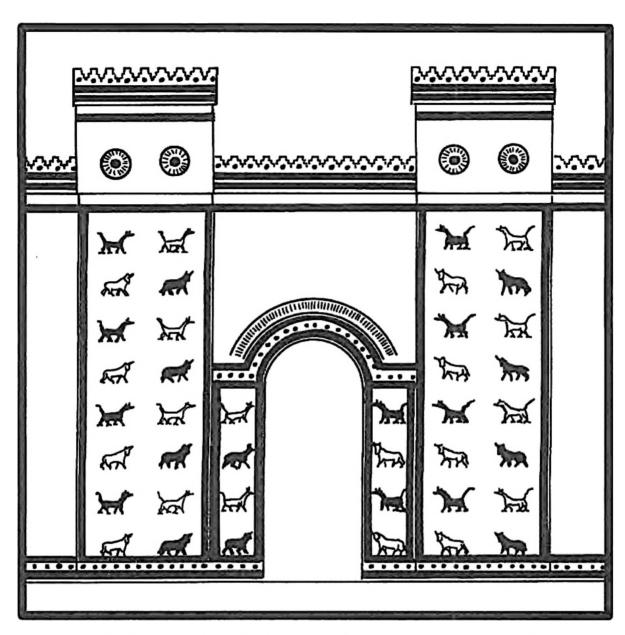
H. Lewy, op. cit., p. 277

² *Ibid.*, p. 275,

³ Ibid., p. 274; G. de Santillana & H. von Dechend, *Hamlet's Mill: An Essay on Myth and the Frame of Time* (Boston, 1969), p. 216.

¹ S. H. Langdon, Tammuz and Ishtar, (Oxford, 1914), pp. 105-106, 179

² *Ibid.*, p. 169.



The Ishtar Gate to the city of Babylon constructed by Nebuchadnezzar II.
(Illustration by Marie-Josèphe Devaux.)

"...it must be kept in mind that the worshippers of the heavenly bodies felt unable to revere a deity which their eyes could not see. As Venus, even as all the other moving stars, has well-determined periods of invisibility, the ancients substituted for it a fixed star of similar appearance to which the worshipper could turn during Venus' absence. [And] the fixed star chosen to thus represent the big and bright planet Venus must have been big and bright and familiar to the average worshipper."

¹ H. Lewy. op. cit., p. 275-276.

Thus when it is stated that the Bow Star is Dilbat, that is Venus, in the month of Abu, what is really being exemplified is that Sirius, that is the Bow Star, should stand in for Venus during that particular month.¹

THE COSMIC LADY'S AVATARS

Donald Mackenzie tells us that, "in the process of time," Ishtar "overshadowed all the other female deities of Babylonia, as did Isis in Egypt." That, however, is only true to an extent since most—almost all—of these other female deities were merely avatars of the same goddess. Thus, as he himself informs us, Ishtar was identical with Nana, as well as Nina, who gave her name to the Sumerian city of Nina as well as the Assyrian one of Nineveh. Other forms of the goddess that he mentions include Mama, Mami, or Ama, all three names of which translate as "mother," as well as Aruru, Bau, Gula, and Zer-panitu. And there were other Ishtar incarnations as George Rawlinson brought to his readers' attention back in the nineteenth century. As he rightly pointed out:

"The Phoenician form [of the goddess Ishtar] was Astarte, the Hebrew Ashtoreth; the later Mendaean form was Ashtar. In Babylonia the goddess was known as Nana, which seems to be the Nanaea of the second [Biblical] book of Maccabbees, and the Nani of [what he alluded to as] the modern Syrians."

Although we shall be meeting most of these manifestations as we continue to unravel our Solar System's cosmic history in the following pages of this volume, separate discussion of each and every one of them at this particular point would be too repetitious. That having been said, in order to firmly base a foundation on which to construct the revelations that will follow, we should, if only briefly, touch upon some of the major ones.

We begin with Belit, which means "Lady" and/or "Mistress," the Akkadian title of Ninhursag, whom the later Greeks knew as Beltis. She was also known as Belit-Sheri, to whom one's eldest son or daughter was pledged to be burned as sacrificial penalty in the breaking of contracts.

There is then the Indo-Iranian Anahita who, according to the Avesta, was asked to descend from the stars,² one of which, as we have already seen, actually formed one of her symbols.³

¹ *Ibid.*, p. 276.

² D. A. Mackenzie, op. cit., pp. 100, 116, 124.

³ Ibid.

⁴ Ibid.

⁵ Ibid.

⁶ G. Rawlinson, loc. cit.

⁷ S. H. Langdon, Semitic Mythology, Vol. V of C. J. A. MacCulloch (ed.), The Mythology of All Races (N. Y., 1931/1964), pp. 340-341.

⁸ *Ibid.*, p. 259; D. A. Mackenzie, op. cit., p. 117.

¹ P. G. Mosca, Child Sacrifice in Canaanite and Israelite Religion (Cambridge, Massachusetts, 1975), pp. 220-221.

² E. J. Thomas, "Recent Theories of Non-Iranian Elements in Ancient Persian Culture," in J. D. C. Pavry (ed.), Oriental Studies in Honour of Cursetji Erachji Pavry (London, 1933), p. 470.

³ P. Nabarz, "Anahita—Lady of Persia," iranian.com (September 2, 2009), p. 1.

Of more importance than that, however, is Anahita's identification as the personification of the planet Venus as it is actually documented in the Zoroastrian *Bundahish*.¹

We next come to the goddess Anat—also spelled Anath—whom we met in the previous chapter in our discussions of male-female deities that were associated with agriculture. Although originating with the Phoenicians in Canaan, Anat's worship passed into Mesopotamia, Ugarit, Egypt, and, to an extent, also Greece. And she, too, can be said to have simply been an avatar of Ishtar.² Also identified as Al-Uzza, the goddess, as Cochrane noted, has also been identified with the planet Venus.³

Among the Egyptians, Anat was identified with their own Hathor.⁴ In Egypt itself, Hathor was known by a multitude of names in the various cities of the country.⁵ Besides her multitude of Egyptian names and her identification as Anat, the epithets and attributes of Hathor distinctly equate her also with Inanna,⁶ Ishtar and Ashtoreth,⁷ Ba'lat, that is Belit,⁸ and just about every other major goddess.

Apart from all that, Hathor also incorporated a multitude of the seemingly incompatible characteristics of each of mankind's ancient female deities. In fact, it was that multitudinous assimilation that has mainly confused most past mythologists. As Alison Roberts found reason to confess, the problem she had with the proper identification of Hathor stemmed from her inability "to find any coherent pattern in the many representations of the goddess." In the end, like many others, Roberts could only identify—or actually misidentify—Hathor as a representation of the Sun. 10

Hathor was so eminent in Egypt that even pharaohs associated themselves with her. Hatshepsut, the queen of the eighteenth dynasty, identified herself with her, while Thutmose III had himself depicted as an infant suckling at her breast.

Rather than envisioning the goddess as the Sun, and seeing that Hathor's Egyptian name of Het-Heru means "House of Horus," Wallis Budge visualized her as the Sun's domain—that is the sky²—even though Horus was anything but the Sun. That she was known as Lady of the Stars does, however, place her *in* the sky. And, to be sure, as with various of these other goddesses, it was with Sothis, also known as Sept, that is Sirius, that Hathor was astron-

¹ B. L. van der Waerden, Science Awakening II: The Birth of Astronomy (Leiden, 1974), p. 193.

² S.H. Langdon, *Tammuz and Ishtar* (Oxford, 1914), pp. 95-96.

³ E. Cochrane, "The Birth of Athena," AEON, Vol. II, No. 3 (1990), p. 15; M. Astour, Hellenosemitica (Leiden, 1967), p. 261

⁴ A. Kapelrud, *The Violent Goddess Anat in the Ras Shamra Texts* (Oslo, 1969), p.15; W. Heimpel, "Catalog of Near Eastern Venus Deities." *Syro-Mesopotamian Studies*, Vol. 4, No. 2 (1982), pp. 20-21.

⁵ E. A. W. Budge, *The Gods of the Egyptians*, Vol. I (N. Y., 1904/1969), pp. 431-433, 437-439; J. N. Lockyer, op. cit., p. 211.

⁶ E. Cochrane, "The Eye Goddess," AEON (January 2000), pp. 52-53.

⁷ D. A. Mackenzie, op. cit., p. 100.

⁸ W. F. Albright, Yahweh and the Gods of Canaan (N. Y., 1968), p. 147.

⁹ A. Roberts, *Hathor Rising* (Devon, 1995), p. v.

¹⁰ *Ibid.*, p. 16.

¹ E. A. W. Budge, op. cit., p. 428.

² Ibid., pp. 428-429.

³ E. Cochrane, Starf*cker: The Catastrophic Conjunction of Venus and Mars (Ames, Iowa, 2006), p. 127.



omically identified with. And, as Lockyer demonstrated, the inscriptional citations concerning the rising of Hathor referred to the rising of Sirius.²

That Sirius served merely as a replacement for the true cosmic body that the goddess really personified during those times when that body was absent from the sky has already been documented. In time, however, it was Sirius that Hathor was believed to have actually personified. This was so true that her temple at Dendera was constructed in such a manner that took the rising of Sirius into consideration. Thus when Sirius rose on New Year's Day, its light fell directly along the axis of the temple. Needless to say, due to Earth's precessional motion, this does no longer occur, but retrocalculations show that it did just that around 700 B.C.²

One thing to keep in mind, however, is that the Dendera temple has been modified since it was built during the Middle Kingdom and that the present structure dates to the Ptolemaic

¹ E. A. W. Budge, op. cit., pp. 435, 436; W. M. Müller, Egyptian Mythology, Vol. XII of The Mythology of All Races (Boston, 1918), pp. 55-56.

² J. N. Lockyer, op. cit., p. 196.

¹ *Ibid.*, pp. 195-197.

² *Ibid.*, p. 197.



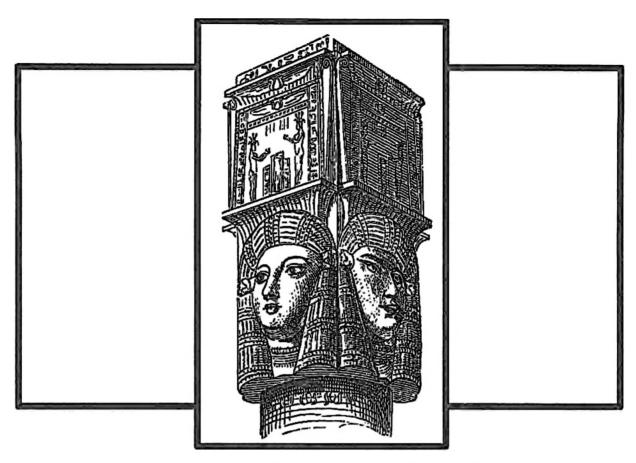
Hathor—as she appears on the facade of the Museum of Egyptian Antiquities, Cairo, Egypt. (Photograph by the author.)

period, even though it was constructed on the very same site as the original one. Modifications, in fact, continued up until Roman times, so that it is no longer possible to determine if the light from the rising of Sirius would have fallen along the temple's axis right from the very start. It is also possible that the temple was modified time and again precisely to keep up with the changing point of Sirius' rising throughout Earth's precessional changes.



The Egyptian Queen Hapshepsut in her ceremonial priestly robes who identified herself with the goddess Hathor.

(Illustration by Tom Tierney.)



Hathor as depicted on one of the columns from her temple at Dendera.

It has, however, to be said that the Egyptians did not themselves identify Hathor as the goddess of the planet Venus. Nor does it help that Hathor was, in the Egyptian Coffin Texts, as well as by Plutarch, additionally identified as Isis, since neither has Isis been identified as Venus by the Egyptians.

The best that can be said at this point is that Hathor's identity as the goddess of the planet Venus can be assumed, as we have seen above, through her assimilation by the very same Egyptians with Anat, as well as with the Greek Aphrodite whom we discuss below.

We should also turn our attention to Allat, the pre-Islamic goddess of Arabia, who was believed to have been the daughter of Allah.

Besides variations of her name—such as Ilat, Hallat, Alilat, Alitta, and Alittu²—Allat was also known as Uzza, or al-Uzza, Manatal, and al-Atar.

¹ Coffin Text, 177; J. N. Lockyer, op. cit., p. 194; see also R. P. Knight, Symbolical Language of Ancient art and Mythology (N. Y., 1836/1892), p. 36.

² S. H. Langdon, Semitic Mythology, Vol. V of C. J. A. MacCulloch (ed.), The Mythology of All Races (N. Y., 1931/1964), p. 15.

³ Ibid., p. 24.

⁴ I. Fuhr, op. cit., p. 39.

⁵ *Ibid.*, p. 50.

So important had this goddess been to Arabians that the prophet Mohammed found reason to rile against her in what became known as the *Qoran*. As he is there said to have dictated:

"Have you thought on Allat and al-Uzza and thirdly on Manat [all of whom were actually one and the same]? Is Allah to have daughters and you sons? These are but names which you and your fathers have invented. Allah has vested no authority in them."

There have been those who have seen the Sun being represented by Allat,² but, as Langdon rightly pointed out, according to Safaitic inscriptions, she was actually identified as the planet Venus.³

And so, also, according to René Dussaud, since, as we have already noted, Allat was *inter alia* known as Manat, or Manatal, and al-Uzza, which turn out to have been the Evening and Morning Star aspects of the planet Venus.⁴

APHRODITE

That Allat was the equivalent of the Babylonian Ishtar is no secret,⁵ as neither is it a secret that she was also identified with the Greek Aphrodite,⁶ who was herself identified with various other goddesses, including Hecate,⁷ Cybele,⁸ Kypris,⁹ Ishtar,¹⁰ Attart,¹¹ Astarte,¹² Anath,¹³ Atargatis,¹⁴ Anaitis,¹⁵ Militta,¹⁶ Hathor,¹⁷ and even the Etruscan Turan,¹⁸ all of whom, directly or indirectly, have been identified as the goddess of the planet Venus.

Velikovsky was quite aware of this identification even though he only presented it in a single source, and then only in a footnote.¹⁹ Even so, he was quite confident in claiming that

¹ Ooran, Sura 53: 19.

² S. H. Langdon, op. cit., p. 15.

³ *Ibid.*, p. 381.

⁴ I. Fuhr, op. cit., p. 39.

⁵ S. H. Langdon, loc. cit.

⁶ Ibid., p. 15; I. Fuhr, op. cit., pp. 38-39; A. Negev, "Understanding the Nabateans," Biblical Archaeology Review (November/December 1988), p. 35.

⁷ W. H. Heidel, *The Day of Yahweh* (N. Y., 1929), p. 516.

⁸ L.Farnell, The Cults of the Greek States, Vol. II (New Rochelle, 1977), pp. 633, 641,

⁹ W. Burkert, Greek Religion (Cambridge, 1985), p.153.

¹⁰ *Ibid.*, p. 152.

¹¹ I. Fuhr, op. cit., pp. 38.

¹² Ibid.

¹³ Ibid.

¹⁴ E. Lipiński, "Cult Prostitution in Ancient Israel?" Biblical Archaeology Review (January/February 2014), p. 55.

¹⁵ I. Fuhr, *op. cit.*, p. 39.

¹⁶ Herodotus, *Historiae*, I: 129-134.

¹⁷ E. A. W. Budge, op. cit., p. 435.

¹⁸ G. Dumézil, Archaic Roman Religion, Vol. II (Baltimore, 1966), p. 422.

¹⁹ I. Velikovsky, Worlds in Collision (N. Y., 1952), p. 251, note 9.

Aphrodite was actually a representation of the Moon, despite the fact that, as with his identification of Isis and Ishtar as Jupiter, he failed to present a single piece of evidence in its favor. That, however, did not stop some of his supporters from tacitly accepting his identification. Among these was Alfred de Grazia, concerning whom Earl Milton was to report:

"Noteworthy...is de Grazia's insistence that the Greek Goddess Aphrodite must be the Moon and not Venus. He makes this identification boldly and has remained steadfast with it in the face of much criticism."

There was also Ralph Juergens,⁴ whom Peter James criticized with the following words:

"This bold interpretation is used by Juergens as the springboard for a paper about the effects that electrical discharges from Mars would have had on the Moon—yet all this is unfortunately based on a false premise."⁵

De Grazia and Juergens have here been singled out because of the great impact they have had on some of those who have been attempting to reconstruct Earth's cosmic history. Although I have appreciated their works, it behooves us all to pay close attention to the sort of evidence on which they have constructed their hypotheses. The above, as also what follows, should have also served to caution other well-meaning researchers, such as Georgia Balbin, and the co-authors Derek Allan and Bernard Delair, from repeating this unfounded identification. To be quite honest, even I had originally found reason to contemplate it, but, fortunately enough, my considerations were kept from publication.

Despite all the above, however, it is not really accurate for Bob Forrest to claim that, at least on this particular issue, Velikovsky undertook "to rewrite Greek mythology," since, despite Velikovsky's lack of evidence, the attempted identification of Aphrodite as the Moon was, and still remains, in vogue. That Aphrodite was not originally connected with Venus has in fact been proposed by more than one mythologist. As Ev Cochrane has pointed out: "It is only with the adoption of Babylonian planetary religion in the fifth century BCE, according to this view, that Aphrodite became identified with Venus."

¹ *Ibid.*, pp. 247, 361.

² A. de Grazia in reply to P. James, "Aphrodite—The Moon or Venus?" Society for Interdisciplinary Studies Review (Summer 1976), pp. 8-11; idem, Chaos and Creation (Princeton, New Jersey, 1981), pp. 32, 77, 139, 176, 222-223, 239, 253-254, 275, 281; idem, The Disastrous Love Affair of Moon and Mars (1Princeton, New Jersey, 1984), in toto.

³ E. Milton, "Alfred de Grazia—Ascent into Dissent: The Quantavolution Books," Catastrophism and Ancient History (January 1985), p. 36.

⁴ R. E. Juergens, "Of the Moon and Mars," Part 1, *PENSÉE*, (Fall 1974), p. 21 (but see rest of article).

⁵ P. James, "Aphrodite—The Moon or Venus?" Society for Interdisciplinary Studies Review (January 1976), p. 3.

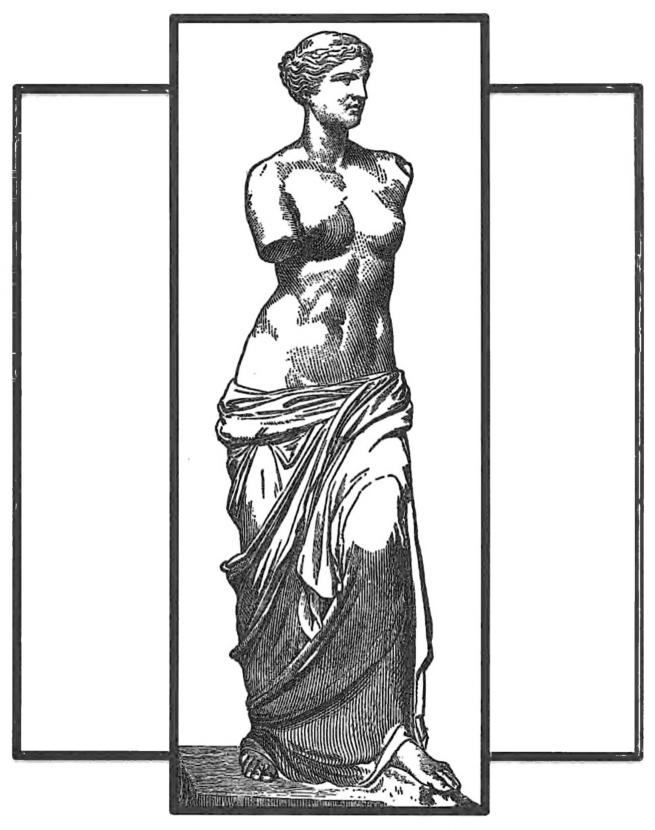
⁶ G. Balbin, Cyclical Catastrophe (Boulder, Colorado, 2005), pp. vii, 15, 17, 90, 98, 231.

⁷ D. S. Allan J. B. Delair, *Cataclysm!* (Santa Fe, New Mexico, 1997), p. 229.

⁸ B. Forrest, Velikovsky's Sources, Part 1 (Manchester, 1981), p. 46.

⁹ See, for instance, W. Heimpel, op. cit., p. 22.

¹ E. Cochrane, The Many Faces of Venus: The Planet Venus in Ancient Myth and Religion (Ames, Iowa, 2001), pp. 94-95.



Aphrodite of Milos-better known as Venus de Milo

In a manner of speaking, even Robert Graves ended up identifying Aphrodite as the Moon when he presented her avatars, Isis and Hathor, as personifications of Earth's lunar satellite.¹ Much earlier than him, Aurelius Augustinus definitely knew of others who just as strongly insisted that the Roman goddess Venus, and therefore the Greek Aphrodite with whom she was identified, was a name by which the Moon was known.² And although Lucian did identify Aphrodite as the planet Venus, he also identified Ishtar/Isis, as well as Astarte, as the Moon.³ That Isis was, at least by some, identified as the Moon, we have already seen. In fact, in following Lucian, Eduard Meyer and William Roscher also held that Ishtar, Astarte, Atargatis, Belit, and al-Ilat were all generally Moon goddesses.⁴

Moreover, the earliest form of Aphrodite's image under which she was worshipped comes from Paphos on the island of Cyprus. As Cochrane pointed out:

"For Homer, Hesiod, and other early [Greek] writers, the goddess was intimately linked to Cyprus. The *Odyssey* lists Paphos as the goddess' homeland, while the *Iliad* makes *Kypris* her most common epithet."⁵

According to Charles Penglase, whom Cochrane quotes, the "earliest evidence for Aphrodite in the Greek and Mycenaean area is the temple in Paphos." And the image that was used to represent her in that city was a ball or sphere—as depicted on Cyprian coins—which, at that late time, would have represented the goddess much better as the lunar sphere than the Venusian pin-point of light that we now see in the night sky.

As Cochrane, however, goes on, the search for Aphrodite's origin should not stop in Cyprus since evidence indicates that the goddess came to Greek waters from the ancient Near East, having passed through Caria, a region that is now in Anatolia. In fact, the goddess gave her name, in the form of Aphrodisias, to one of the cities in the Carian region. Under her name Ourania, or Urania, the goddess was known to the Greeks to have had antecedents as far east as Mesopotamia for Pausanias calls the Assyrians the first worshippers of this goddess who also extended her sway, under different names, over Cyprus, Phoenicia and Asia Minor."

What should, however, be stressed is the fact that Lucian of Samosata, who is the only source Velikovsky presented for the identification of Aphrodite as the planet Venus, was not alone among ancient authorities who so identified the Greek goddess. Moving back in time from the Roman centuries to the earlier Greek eras we can start with the Neo-platonic

¹ R. Graves, *The Greek Myths*, Vol. 1 (Harmondsworth, 1964), p. 223.

² Aurelius Augustinus, De Civitate Dei, 7:15.

³ Lucian, De Dea Syria, 4.

⁴ E. Meyer, "Astarte," in W. H. Roscher, *Lexikon der Mythologie*. See also other articles on Aphrodite in same *Lexikon*.

⁵ E. Cochrane, "Aphrodite Urania," AEON (April 1998), p. 46,

⁶ C. Penglase, Greek Myths and Mesopotamia (London, 1994), p. 176.

⁷ A. S. Murray, op. cit., p. 95.

⁸ Ibid.

⁹ E. Cochrane, loc. cit.

¹⁰ W. F. Albright, op. cit., p. 150

¹¹ E. G. Suhr, The Spinning Aphrodite (N. Y., 1969), p. 19; Pausanias, Description of Greece, I: 14: 7.

philosopher named Porphyry, who not only referred to Aphrodite as a star, but, more importantly, as the Evening one. But there were also Plotinus, Aristotle, Manetho, Cicero, Diodorus Siculus, Pliny the Elder, and Claudius Ptolemy.

Since, with the exception of Plotinus, Velikovsky had reason to quote every single one of these classical authors in his own work, although not on Aphrodite's identity as Venus, he cannot be excused on the grounds of ignorance. James was of the opinion that "Velikovsky felt he must suppress Aphrodite/Venus in order to make room for Athena/Venus," whom we shall be discussing in the next chapter, "and avoid having two Greek deities for the same planet." But since Velikovsky also knew about Selene, the correct Greek goddess of the Moon, did not his identification of Aphrodite make for more than one Moon goddess? And if, even according to him, two separate goddesses could have stood for the Moon, why not two goddesses for the planet Venus? Besides, Athena aside, the Greeks definitely had more than two deities to account for the same planet Venus.

Even so, James was probably right since having both Aphrodite and Athena as the planet Venus, the smiting of one by the other, as described in the *Iliad*, would translate as a clash between one and the same planet, which would make no sense. As I have elsewhere indicated, and as I continue to emphasize, Velikovsky should have never relied on the celestial battle of the gods during the siege of Troy as described in Homer's *Iliad*, which is anything but historical.¹² Not that *that* was his only fault.

ASTARTE

As we have already seen, Allat, who led us to Aphrodite, was also identified as the goddess Astarte,¹³ the Greek version of the Near Eastern Ashtart, sometimes rendered as Athtart, also known as Ashtoret and/or Asherah, who was also known as Qudshu, meaning Holy or Holiness, and identified with Anat.¹⁴

As confusing as all the above may seem to most readers, it gets somewhat worse since there are even more goddesses that were merged with Ashtart/Astarte, among whom were

¹ Eusebius Pamphili, Evangelicae Praeparationis, III: xi: 114b.

² Plotinus, Ennead 3:5; idem, On Love, 8:20.

³ P. James, op. cit., p. 2.

⁴ Ibid.

⁵ Cicero, De Natura Deorum, II:52-53.

⁶ Diodorus Siculus, Bibliotheca Historica, II:30.

⁷ Pliny, *Natural History*, 2:36.

⁸ Ptolemy, *Tetrabyblos*, I: 4.

⁹ P. James, op. cit., p. 3.

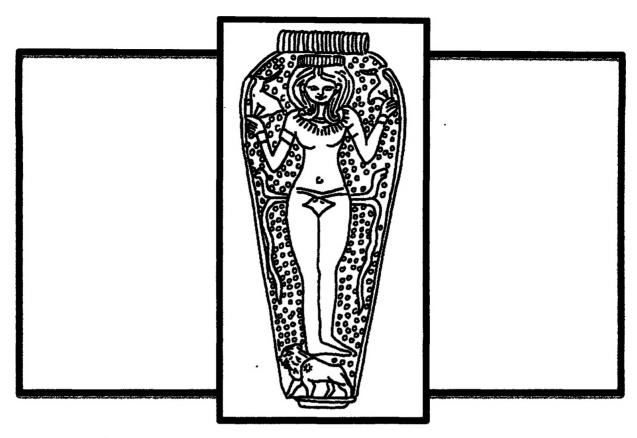
¹⁰ I. Velikovsky, op. cit., p. 301.

¹¹ See *ibid.*, p. 250.

¹² See here, D. Cardona, in reply to B. Forrest, "Velikovsky's Sources: Pro et Con," KRONOS Vol. XI, No. 3 (Summer 1986), pp. 86-87; idem, "Planetary Identities: II—The Mythology of Homer," Chronology & Catastrophism Workshop (1989, No.1), p. 5.

¹³ S. H. Langdon, op. cit., p. 381.

¹⁴ R. Hestrin, "Understanding Asherah," Biblical Archaeology Review (September/October 1991), p. 55; P. Gaber & W. G. Dever, "The Birth of Adonis?" Archaeology Odyssey (Spring 1988), p. 55.



Gold pendent from Minet el-Beida, Ras Shamra, that is ancient Ugarit, in present-day Syria, that has been identified as representing the goddess Qudshu/Ashtart.¹
(Illustration by Marie-Josèphe Devaux.)

Atargatis, Tanit, Aphrodite, Hera, and Juno, besides her title of Balat (Beltis or Belit), which simply means "Goddess."

In her name of Astarte, the goddess was anciently worshipped in the city of Tyre in what is now Lebanon where a meteoritic stone related to her was worshipped. The same goddess was also worshipped in a temple in Aphaca, now known as Afqa, in the same Lebanon, where "the flashing of a meteor" was identified with the goddess. 10

¹ M. D. Coogan, "10 Great Finds," Biblical Archaeology Review (May/June 1995), p. 42.

² L. E. Stager, "When Canaanites and Philistines Ruled Ashkelon," *Biblical Archaeology Review* (March/April 1991), p. 41

³ Ibid.

⁴ W. Burkert, op. cit., p. 152.

⁵ Ibid.; S. H. Langdon, op. cit., p. 21; W. H. Heimpel, op. cit., p. 21.

⁶ A. Bonanno, "The Phoenicians and the Maltese Prehistoric Cultural Landscape," in D. A. Barrowclough & C. Malone, Cult in Context: Reconsidering Ritual in Archaeology (Oxford, 2007), p. 109.

⁷ Ibid.; E. Lipifiski, loc. cit.

⁸ S. H. Langdon, op. cit., p. 67.

⁹ R. Cumberland, Sanchoniatho's Phoenician History (London, 1720), p. 36.

¹⁰ J. G. Frazer, Adonis Attis Osiris: Studies in the History of Oriental Religion, Vol. I (London, 1914), p. 259.

More to the point, the Phoenician Ashtart has correctly been described as "the most beautiful of heavenly bodies, the planet Venus." So, also, with Astarte especially in "her changes from a morning to an evening star" that "were carefully noted by the Babylonian astronomers who drew omens from her alternate appearance and disappearance." But let us cut across the lawn, as we have often done throughout this series, by stating that all of the goddesses mentioned above have been identified as the sacred representatives of the planet Venus.

The question that now needs to be answered is one we have already asked: What has the planet Venus to do with the proto-Saturnian events we have been reconstructing throughout this series?

¹ L. Delaporte, "Phoenician Mythology," New Larousse Encyclopedia of Mythology (London, 1972), p. 76.

² J. G. Frazer, op. cit., p. 258; M. Astour, op. cit., p. 116.; W. F. Albright, op. cit., p. 134.

³ W. Heimpel, op. cit., in toto.

Chapter 22

Hesiod Versus Homer

ATHENA

ere we to judge by her designation of *Meter* in the city of Elis,¹ the Greek Athena should be considered another form of the Mother Goddess whose identification with other divine mothers strengthens the case. Thus, according to Stephen Langdon, Athena compares quite favorably with the Babylonian Ishtar, the Arabic Allat, as well as the Phoenician Anat,² the last identification of which is upheld by ancient Cyprian inscriptions.³ Plutarch also tells us that the Egyptians often called Isis by the name of Athena,⁴ while another Egyptian deity with whom Athena was identified was named Neith.⁵ In fact, Athena has been claimed by Martin Bernal to have been *derived* from Neith,⁶ and while it is no secret that Bernal has come under severe criticism concerning his various derivations,⁷ that of Athena from Neith is not exactly beyond possibility.

Let it here be stated quite clearly that the Greeks, whose goddess Athena was, never identified her as a personification of the planet Venus. Thomas Ferté was entirely wrong in stating otherwise, as James Fitton correctly stated in the very same publication in which Ferté voiced his inaccuracy. In fact, the Greeks never presented Athena as an embodiment of any planet. This is no different than Isis who was also never so identified by the Egyptians whose goddess she really was. And yet, knowing this, it is especially Athena that Velikovsky claimed to have personified the planet in question among the ancient Greeks. While, as we have seen, he downgraded Aphrodite to a lesser lunar role, he did not acknowledge Porphyry's claim that it was Athena who actually personified the Moon. While Porphyry's identification of Athena as the Moon cannot be substantiated, Velikovsky's identification of the goddess' Venusian attributes has also come under severe criticism. Even so, Bob Forrest was not entirely right

¹ I. Fuhr, "On Comets, Comet-Like Luminous Apparitions and Meteors," KRONOS (Fall 1982), p. 45.

² S. Langdon, Tammuz and Ishtar (Oxford, 1914), pp. 95-96; idem, Semitic Mythology, Vol. V of C. J. A. MacCulloch (ed.), The Mythology of All Races (N. Y., 1931/1964), p. 381; see also S. G. Hyslop & B. Pohanka, Empires Ascendant (Alexandria, Virginia, 1990), p. 121.

³ A. Eaton, The Goddess Anat (Ann Arbor, 1969), pp. 16, 45.

⁴ Plutarch, Moralia, Vol. V: "Isis and Osiris" (London, 1962), p. 147

⁵ D. Mallet, Le Culte de Neit à Saïs (Paris, 1888), p. 189.

⁶ M. Bermal, Black Athena, Vol. II (New Brunswick, 1991), pp. 86 ff.

⁷ See, for instance, the review of *Black Athena*, Vol. II by R. L. Pounder, *Biblical Archaeology Review* (September/October 1992), pp. 14, 16, but, especially, F. J. Yurco, *et al.*, in M. R. Lefkowitz & G. M. Rogers (editors), *Black Athena Revisited* (North Carolina, 1996), *in toto*.

⁸ T. L. Ferté, "The Future of an Idea," CHIRON: Journal of Interdisciplinary Studies (Winter-Spring 1974), p. 9.

⁹ J. Fitton, "Velikovsky Mythohistoricus," in *ibid.*, p. 35.

¹⁰ I. Velikovsky, Worlds in Collision (N. Y., 1952), pp. 170 ff. and throughout.

¹¹ Eusebius Pamphilii, Evangelicae Praeparationis, III: xi: 113 c.

¹ See, for instance, B. Forrest, Velikovsky's Sources: Part 1 (Manchester, 1981), pp. 79-80.



Athena—at the Academy of Athens, Greece.
(Photograph by the author.)

when he claimed that Athena's association with the planet Venus was "pure assumption" on Velikovsky's part. As with various other female deities we have already touched upon, the Venusian identification of the goddess in question can be circuitously verified through the interlocking characteristics of the various Venus deities with whom she has been mythologically associated.

PLANETARY EJECTIONS

It was mainly the Greek poets Hesiod and Pindar, among others, who claimed that Athena was born from Zeus, springing fully grown from his skull in a heaven-shaking event.² As is known among mythologists, Zeus has long been thought to personify the planet Jupiter.³ It was this particular mythic event, more than any other, that convinced Velikosky that the planet Venus was actually ejected by the larger planet Jupiter.⁴ Not surprisingly, this was considered outright nonsense by various authorities, the most critical of whom was Carl Sagan.⁵

And yet, to be sure, planetary ejections have been discussed by other interested parties, including conventional astronomers, besides Velikovsky. In fact, way before Velikovsky, back in 1879, the astronomer George Howard Darwin, the son of the more illustrious Charles, had already come to the conclusion that Earth had actually spat out a planetary ring of debris that soon congealed to form the Moon.⁶ The Estonian astrophysicist Ernest Opik was also of the opinion that "the possibility of the Moon having broken off from the earth cannot be entirely ruled out." Other proponents of the fissioning process by which the Moon was cleaved off Earth included the astronomer William Pickering, the physical chemist Harold Urey, and the neuroscientist John O'Keefe. And while Tom Van Flandern might not be considered to have been all that conventional among astronomers, he, too, stated that, as far as the Moon's origin is concerned, "the preponderance of evidence" favors "the pure fission theory" over other possibilities. As he had it stated: "Most significant to me is that the fission theory is the only one which can adopt a starting point and derive a Moon closely like the real one." Even Mars has been theorized to have been "thrown off the Earth," while Mercury has been thought by some to have fissioned off the planet Venus. And that's not all.

¹ Idem, A Guide to Velikovsky's Sources (Santa Barbara, California, 1987), p. 19.

² Hesiod, Theogony, 912-936; Pindar, Olympia, VII: 36.

³ E. C. Krupp, Skywatchers, Shamans & Kings (N. Y., 1997), p. 283

⁴ I. Velikovsky, op. cit., pp. 172 ff.

⁵ C. Sagan, "An Analysis of Worlds in Collision," in D. Goldsmith (ed.), Scientists Confront Velikovsky (Ithaca, N. Y., 1977), pp. 60-62.

⁶ G. H. Darwin, "On the Precession of a Viscous Spheroid and on the Remote History of the Earth," *Philosophical Transactions of the Royal Society*, 170 (1879), pp. 535 ff., although the entire paper, pp. 447-538, should be read.

⁷ E. J. Opik, The Oscillating Universe (N.Y., 1960), p. 29.

⁸ P. Moore, New Guide to the Moon (N. Y., 1976), pp. 33-36.

⁹ T. Van Flandern, Dark Matter, Missing Planets & New Comets (Berkeley, Californoa, 1993), p. 270. ¹⁰ Ibid.

¹¹ P. Moore, loc. cit.

¹ T. Van Flandern, op. cit., p. 251.

Raymond Lyttleton's work on cosmology was considered so highly that it resulted in his election as a Fellow of the Royal Society and even won him the Society's famed medal. In a paper he published in 1960, very much like Velikovsky, he not only concluded that Venus "most probably erupted from Jupiter," but so, also, must have "the rest of the terrestrial planets," which theory he reiterated a year later. Whichever way they are formed, the "rapid rotations" of "primitive planets," so he concluded, "will tear them apart" and each planet "will divide into two separate main pieces that escape completely from each other." He even envisioned Jupiter and Saturn as having formerly formed a single "primitive planet" that had so divided. And among those who saw Lyttleton's concepts as not being that far out was Great Britain's Astronomer Royal, William Hunter McCrea, while stating that "the densities of the Earth, Moon and Mars are apparently understandable if these bodies resulted from the break-up of a single rotationally unstable planet."

The very idea that planets were born from planets—smaller ones from larger ones—continued to win many a researcher among Velikovsky's aficionados. Among these was Peter Warlow whose main supposition he himself summarized in the following words:

"...the Solar System is most likely to have come into being by a parturition process in which the larger bodies, such as Jupiter, Saturn, Uranus and Neptune, were born from the Sun, and the lesser bodies, such as Earth, Venus, Mars, Mercury, Pluto, and the various satellites, were born of the larger planets."

To be sure, Warlow's claim that Venus, or a Venus-like body, could have been "ejected from the interior of Jupiter," resulted from Eric Crew's initial quantification concerning "the influence of electrical charges on cosmic orbits." And while the entire theory was also taken into serious consideration by Wallace Thornhill, the improbability of such an event continued to be debated among some of these very enthusiasts.

Velikovsky's devotees were not, however, the only interested parties that continued to discuss the planetary ejection theory. Among the more orthodox cosmologists we can name Vladimir Zharkov and A. V. Kozenko who revived the theory by again proposing that Jupiter must have ejected an "embryo" that initiated the formation of Saturn, with further ejected

¹ R. A. Lyttleton, "Dynamical Calculations Relating to the Origin of the Solar System," Monthly Notices of the Royal Astronomical Society, 121 (1960), in toto.

² Idem, Man's View of the Universe (N.Y., 1961), p. 36.

³ Idem, The Modern Universe (London, 1961), pp. 170 ff.

⁴ Ibid.

⁵ W. H. McCrea, "Density of the Terrestrial Planets, Nature, Vol. 224 (1969), pp. 28-29.

⁶ P. Warlow, The Reversing Earth (London, 1982), p. 186.

⁷ E. W. Crew, "Orbits of Core Material Ejected from Gaseaous Planets," KRONOS, Vol. X, No. 2 (Winter 1985), pp. 13 ff.; idem, "Erratic Events in the Solar System." Chronology and Catastrophism Review, Vol. X (1988), pp. 43 ff.

⁸ W. Thornhill, "Formation of Chondritic Meteorites and the Solar System," in *ibid.*, pp. 51 ff.

⁹ See, for instance, C. L. Ellenberger & E. W. Crew, "The Core Ejection Hypothesis," *Chronology & Catastrophism Workshop* (1989, No. 1), pp. 26-27; B. Newgrosh & E. W. Crew, "The Core Ejection Hypothesis," in *ibid.*, (1989, No.2), pp. 8-9.

"embryos" forming the planets Uranus and Neptune. In a general way, so did Halton Arp, even though there are some who contend that, because of his ostracism by orthodoxy, he is no longer to be counted among conventional astronomers. And yet, by the end of the twentieth century, the idea of planets "birthing punier planets" was being spoken of as a matter of fact.

As noted in an earlier work of ours,⁴ the planetary ejection models developed by those mentioned above differ so much from each other that, at best, only one of them could be correct. But even then, showing that an event could have transpired does not necessarily mean that it did.

In an interview that was conducted by the editor(s) of the periodical Science & Mechanics, Velikovsky stated that although, according to him, the planet Venus came into close terrestrial contact about 3500 years ago, this event "didn't happen immediately after Venus escaped from Jupiter." On the contrary, so he then claimed, Venus "had been orbiting the Sun for hundreds of thousands—if not millions—of years" after its expulsion. But, as Miranda Robertson continued to correctly note six years later, Velikovsky's initial claim was that the planet Venus "originated as a comet torn out of Jupiter about 1500 BC." Granted that there is nothing inappropriate in changing, or correcting, one's original concept—I myself have done so more than once—how could Velikovsky match a millions-year-old Venus with his belief that mankind remembers it having been ejected by Jupiter? Even so, the most important question on this particular issue remains: Did the planet Jupiter really eject the planet Venus or not?

SACRED PARENTAGE

Despite the popularity of the tale concerning Athena's birth from the head of Zeus, Athena's parentage, as also the nature of her birth, was not unanimously agreed upon among the classical Greeks. To some, it was the oceanic Poseidon who had fathered Athena while Zeus became her adopted father only because the goddess disowned the god of the sea. To others, Athena's father was Itonus, king of Iton in Phithiotis. Next in popularity to Hesiod's tale was that which claimed that Athena was fathered by the giant Pallas whom she later slew and flayed. According to Apollodorus, on the other hand, Pallas was the name of Athena's playmate whom she also slew, but accidentally, while engaged in friendly combat. Apollonius Rhodius tells us that, according to the Pelasgians, Athena was born on the shore

¹ V. N. Zharkov & A. V. Kozenko, "On the Role of Jupiter in the Formation of the Giant Planets," Earth Physics Institute, Academy of sciences of the USSR (January/February 1990).

² H. Arp, Seeing Red: Redshifts, Cosmology and Academic Science (Montreal, 1998), p. 222.

³ See, for instance, J. Glausiusz, "Solar Revisionism." Discover (March 2000), p. 54.

⁴ D. Cardona, God Star (Victoria, British Columbia, 2006), p. 472.

⁵ Anonymous, "The Catastrophic Worlds of Immanuel Velikovsky," *Science & Mechasnics* (July 1968), p. 103 (emphasis as given).

⁶ *Ibid*. (emphasis as given).

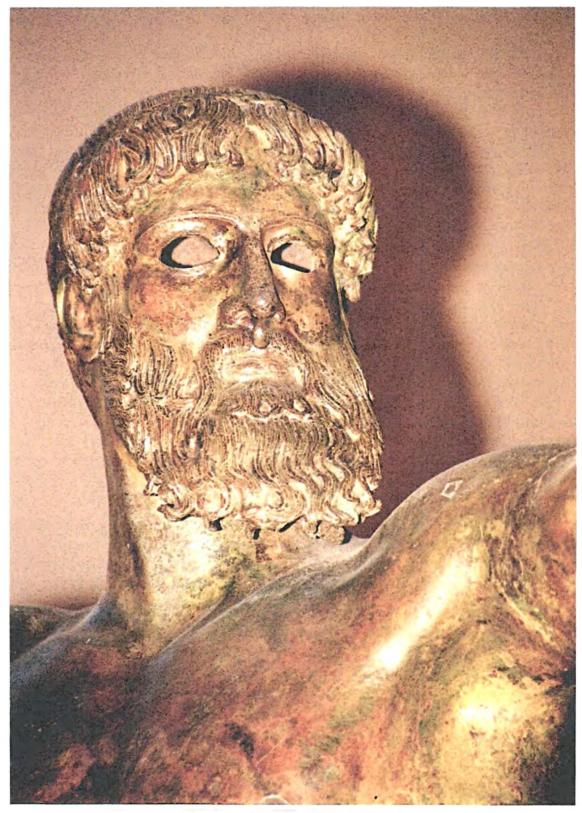
⁷ M. Robertson, "Velikovsky in the Open," Nature (March 15, 1974), p. 190.

⁸ Herodotus, *Historiae*, IV: 180.

⁹ Pausanias, Descriptions of Greece, IX: 34: 1.

¹ Tzetzes, On Lycophron, 355.

² Apollodorus, Bibliotheka, III: 12: 3; see also Pausanias, op. cit., IX: 33: 5.



Zeus—was he really Athena's father? (Photograph by the author, courtesy of the National Archaeological Museum of Athens, Greece.)

of Lake Tritonis in North Africa, having been fostered by Triton (or Tritos), the deity of the lake.²

Velikovsky himself stated that: "One or two authors thought that Athene [variant spelling of Athena] was born of Cronus [that is, Kronos]." Philo Byblius, basing his report on that of Sanchoniathon and quoted by Eusebius Pamphili, otherwise known as Eusebius of Caesarea, was definitely one of those who claimed that Athena was the daughter of Kronos. And, needless to say, as far as the Greeks were concerned, Kronos was the god of the planet Saturn.

Velikovsky notwithstanding, what continues to confuse the issue is that, according to various ancient sources—including Homer,⁵ Diodorus Siculus,⁶ Apollodorus,⁷ Euripides,⁸ and Cicero⁹—Aphrodite, too, was said to have been fathered by Zeus. And yet, as Elmer Suhr pointed out, while being claimed to have been his daughter, Aphrodite was considered to have actually been "older than Zeus himself."¹⁰

Aphrodite's Roman counterpart was the goddess Venus whom Velikovsky also claimed to have represented the Moon¹¹—which continued to confuse an already confusing situation. As Peter James stressed: "One cannot argue with the obvious fact that Venus was Venus."¹²

While, other than the Pelasgian myth, these sources may be said to be later than Hesiod, it must also be borne in mind that, from a mytho-historical point of view, the Greeks were themselves a very late people, having settled the land that was to become Hellas, that is Greece, well after the presumed ejection of Venus. Their earliest extant works, attributed to Hesiod and Homer, appeared even later. If mythological themes are truly a documentation of cosmic events, as is here being claimed, it would be logical to assume that those documented closest to those occurrences would contain the most correct accounts. Concerning the event in question, Greek sources cannot vie for that distinction. In this instance, Greek sources can only be upheld if, and only if, their content does not contradict that of earlier records.

DIVINE BIRTH

The tale of Aphrodite's birth is well known. Hesiod told how the goddess was born of the foam—from which her name is derived—that was generated in the ocean by the severed genitals of Uranus when Kronos, his son, castrated him.¹³ If Aphrodite truly had a father, according to this tale it would have to have been Uranus and, in fact, one of Aphrodite's titles

¹ Apollonius Rhodius, Argonautica, IV: 1310.

² G. W. Cox, Mythology of the Aryan Nations (N. Y., 1870), p. 249.

³ I. Velikovsky, *op. cit.*, p. 173.

⁴ Eusebius Pamphili, op. cit., I: x: 36, 38.

⁵ Homer, *Iliad*, V: 312.

⁶ See Eusebius Pamphili, op. cit., II" i: 45c.

⁷ Apollodorus, op. cit., I: 3: 1.

⁸ Euripides, *Helen*, 1098.

⁹ Cicero, De Natura Deorum, III: xxiii.

¹⁰ E. G. Suhr, Before Olympos (N. Y., 1967), pp. 14-15.

¹¹ I. Velikovsky, op. cit., pp. 170, 361.

¹² P. J. James, "Aphrodite—the Moon or Venus?" Society for Interdisciplinary Studies Review, Vol. I, No. 1 (January 1976), p. 3.

¹³ Hesiod, op. cit., 178-208.

is Urania. Robert Graves gave the meaning of Urania as "queen of the mountains," although elsewhere he also translated the name as meaning "heavenly." It is more than probable, however, that the goddess was simply called Urania because she was the daughter of Uranus. Although mythologists have been close to unanimous in identifying Uranus as the personification of the sky—which explains Graves' meaning of "heavenly" as the name of Urania—research indicates that Uranus, or Ouranos, was only an alias, or alter-ego, of Kronos who was Saturn.

It has to be said, however, that, despite Peter James' advocacy of Aphrodite's Venusian identification, he still found fault with Hesiod's version of her birth. As he had it stated:

"...it should be remembered that the myth of Aphrodite's birth from Ouranos' genitals is a version peculiar to Hesiod and to the authors who followed him. Most other [Greek] poets and mythographers gave her a quite different parentage."

First of all, as already noted, Hesiod did not claim that Aphrodite was born from Ouranos' genitals, but from the foam that was generated by his castrated members when these fell into the ocean. Secondly, just because this myth consists of a version that is peculiar to Hesiod does not, of itself, make the myth any less reliable. That those Greek authors who held the same belief followed Hesiod also means nothing. Since Hesiod and Homer, to our knowledge, were the earliest Greek poets whose works remain extant, it could not have been otherwise. By the same token it can be said that the myth which maintains that Zeus was Aphrodite's father, which James accepts as the correct version, is peculiar to Homer and to the authors that followed him. And although Homer's version was more widely accepted, it does not make that particular myth any more correct. Popularity, after all, is not equivalent to truth. What this particular argument boils down to is that the preference of one myth over the other becomes a choice between Hesiod and Homer.

Let me here return to Sanchoniathon who had the following to say concerning Greek mythology:

"But the Greeks, surpassing all in genius, appropriated most of the earliest stories, and then variously decked them out with ornaments of tragic phrase, and adorned them in every way...Hence Hesiod and the celebrated Cyclic poets framed theogonies of their own...and with these fables...they conquered and drove out the truth."

Through this, in a somewhat longer passage, Sanchoniathon accused the Greeks of "willfully" tampering with the myths they received from other nations, changing the tales to suit the temperament of their own countrymen. It is, perhaps, an unfair accusation, but there is

¹ R. Graves, *The Greek Myths*, Vol. 1 (Harmondsworth, 1964), p. 49

² *Ibid.*, Vol. 2, p. 412.

³ D. Cardona, op. cit., pp. 168-169

⁴ P. James, "Aphrodite—the Moon or Venus?" Part 2, Society for Interdisciplinary Studies Review, Vol. I, No. 3 (Summer 1976), p. 13.

Ibid., pp. 13, 19.

⁵ *Ibid.*, p. 13.

⁶ Eusebius Pamphili, op. cit., 1: x: 39.

no doubt that the Greeks did borrow the myths of other races. Sanchoniathon seems to have believed in a borrowing from the Phoenicians. Graves opted for importations from Crete, Egypt, Palestine, Phrygia, Babylonia, and even the Galla warriors of East Africa. James adds Hurrian and Hittite origins to the list. None of this is new and although I cannot quite see a borrowing from East African Galla warriors, research has indicated that all of the nations mentioned above, as also India, can lay claim to having had their myths borrowed and tampered with by the Greeks.

And yet I will add this: Personally, I would never accuse either Hesiod or Homer of having tampered with the myths willfully. In my opinion, very much as in the case with modern mythologists, both Hesiod and Homer were honestly misled by the complexity of ancient belief. Be that as it may, it would be wise to heed James' own admonition when he argued against the use of Greek mythology as a yardstick. Greek mythology, it is true, is not the only one that incorporates motifs and wholesale tales borrowed from other nations, but since the Greeks, as a people, arrived relatively late on the scene of ancient history, their mythology necessarily forms a very recent link in a long chain that stretches back into hoary antiquity. As James ably noted:

"The tales of the gods canonised by Homer and Hesiod were certainly not set down before the 8th century B.C. By comparison, the Egyptians had already been recording their myths for a good two millennia by this date. Greek myth must certainly be seen as one of the 'youngest' and potentially most corrupted traditions of the ancient Near East."

It therefore has nothing to do with whether Hesiod or Homer should be relied upon. Reliance should rest upon the correctness of the reported incidents. Hesiod and Homer, like everybody else, could have been correct in one instance and wrong in the other. But since comparative mythology is the only true guide and that the more ancient myths should logically prove closer to the truth, let us review the myths devoted to the goddess of other nations as we move further back into antiquity.

We begin in India.

¹ R. Graves, op. cit., Vol. 1, pp. 11-12, 38.

² P. J. James, op. cit., pp. 12, 19.

³ *Ibid.*, p. 12.

⁴ Ibid.

Chapter 23

Indic Influences

THE MAHADEVI

pace does not here permit us to reiterate Velikovsky's misidentifications of those Hindu deities that he presented as avatars of the Venusian one. All that can be said on that particular subject here is that, while Velikovsky's knowledge of mythology was rather limited, it was even much worse when it came to Hinduism. Those interested in that particular discussion can consult our earlier work on the subject. Actually, as I have elsewhere stated, it was Artur Isenberg who had originally presented the best case for the identification of a particular Hindu deity as the proto-planet Venus. And, to be sure, his choice was the most obvious one and it remains puzzling how Velikovsky managed to miss it. The candidate in question is Devi, the Hindu goddess par excellence.

Devi is often used, even by the Hindus themselves, as the proper name of this particular goddess. But, actually, devi, the feminine of deva, merely means "goddess." In Hindu mythology, every goddess—and there are a vast number of them—is a devi. The use of this word as a proper name signifies the Goddess in much the same way we of the Western World mean the Deity when we use the word "God."

Devi is also popularly known as Mahadevi, or Great Goddess, thus differentiating her from her lesser female cohorts. Personally, I prefer that designation and as such shall I henceforth refer to her. As Isenberg correctly observed, her actual names "are legion."

Isenberg has also pointed out that Indologists have translated the word *devi* to mean "that which is by its nature Light and Manifestation." By the same token, however, every Hindu god, *deva*, and goddess, *devi*, contains the same connotation.

"Deva, god, comes from the root div, 'to be resplendent,' 'to shine.' In primeval India the idea of god was associated with the idea of light."

Since Hindu deities, like those believed in by all other nations in all their religions, owe their origin to the anthropomorphosis of celestial bodies, it is understandable how their association with light germinated. As we all know, however, Venus is not the only celestial luminary.

¹ D. Cardona, "Child of Saturn," Part II, KRONOS, Vol. VII, No. 2 (Winter 1982), pp. 29 ff.; idem, "Vishnu Born of Shiva," in ibid., Vol. VII, No. 3 (Spring 1982), pp. 15 ff.

² Idem, "Child of Saturn," Part III, in ibid., p. 3.

³ A. Isenberg, "Devi and Venus," in *ibid.*, Vol. II, No. 1(August 1976), pp. 89-103.

⁴ *Ibid.*, p. 91.

⁵ *Ibid.*, p. 94.

⁶ H. de Wilman-Grabowska, "Brahmanic Mythology," Asiatic Mythology (London 1972), p. 102.

That the Mahadevi is also referred to as *tara*, meaning "star," and is said to be "of the form of the Moon," continues to identify her as a celestial body, but, again, not necessarily as Venus.

There is, however, a myth of the Mahadevi that compares one of her activities favorably with an episode in the mythology of Athena, as long as it is kept in mind that the event in question, which will be treated fully elsewhere, is here presented out of sequence.

DURGA

In Greek sources, Athena is described as having taken part in the revolt of the giants. It was during this encounter that Athena faced and bested the monster Pallas whom we met in the previous chapter.² This battle is an echo of the one between the Mahadevi and the demon known as Durga or Durgama.

Like Pallas, Durga caused much havoc both in heaven and on Earth. He drove the gods from their kingdoms, changed the courses of rivers, and forced Earth to produce crops out of season.

It was amid similar turmoil that the Greek Pallas attempted to rape Athena. But the goddess stood up to him, battled with him, slew him, and even flayed him.³ It was because of this victory over Pallas that Athena received his name as an epithet, thus becoming known as Pallas Athena.

In like manner, having slain Durga, the Mahadevi also assumed the name of her vanquished enemy and, in her turn, she, too, became known as Durga or, more aptly, Durgadevi.⁴

KALI

Kali is another of the "legion" of names by which the Mahadevi is known. It was under this name and guise that she manifested her most fearsome aspect. At one time, Kali's rites involved the sacrificial slaughter of human beings. In Bali, where she is known as Rangda, self immolation under trance continues to be replicated in her name, as most tourists to that country can attest. Kali is often portrayed with hanging tongue and mouth dripping with blood. Her thirst for gore was developed after she had slain the asura—i.e., demon—named Raktavira, who is also known as Raktabija. Out of every drop of blood that fell to the ground from the wounded asura, there sprang another demon possessing the same courage, strength, and valor. In order to keep Raktavira's blood from reaching the ground, Kali was forced to drink it as it gushed out. This drinking of blood gave her such a blind lust for destruction that, when she gave free reign to it, nothing was able to stop her.

¹ A. Isenberg, loc. cit.

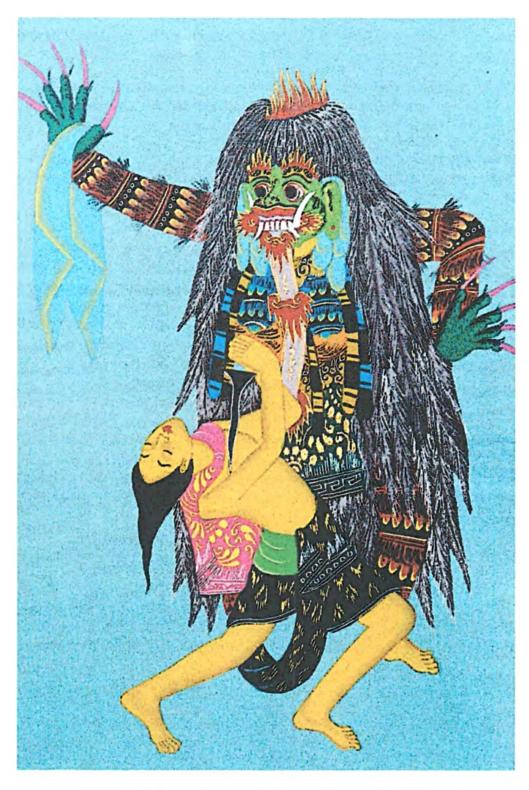
² Apollodorus, Bibliotheka, I: 6.

³ Ibid.

⁴ Swami Jagaddisvarananda (trans.), The Devi-Mahatmya/Durga-Saptasati (Madras, 1953), p. 149.

⁵ V. Ions, *Indian Mythology* (London, 1967), p. 93.

⁶ A. Isenberg, op. cit., p. 93.



Self immolation under trance in honor of Rangda, the Balinese Kali. (Painting by Ida Warta of Batuan, Bali. Photograph by the author.)

"On one occasion Shiva himself had to mingle among the demons whom she was slaughtering and allow himself to be trampled underfoot in her dance of victory, as this was the only way to bring her to her senses and save the world from collapse."

That myth, too, is echoed by ones involving the Egyptian goddess known as Sekhet—also rendered Sekhmet—and the Semitic Anath, the latter of whom was identified by the ancients themselves with Athena.² As William Albright rightly noted:

"...there are many traits which Anath shares in common with the Indic goddess Kali or Durga. In fact, the respective figures are in some ways so similar that coincidence can scarcely be the only explanation."³

And so, likewise, Marvin Pope whom Albright mentions.⁴ Moreover, the above is borne out through a myth from Ugarit in which we read of Anath coming to the aid of Baal when he was beset by his enemies. As bloodthirsty a goddess as Kali, Anath did not limit her slaughter to demons but went on a drunken rampage against all of mankind.⁵ In the end, very much like Shiva, Baal was forced to intervene in order to stop the goddess from annihilating the human race.

Meanwhile, that Sekhet, or Sekhmet, was the personification of a celestial body is evidenced by the fact that she is often portrayed with a planetary disk atop her head. This particular Egyptian goddess was actually the malevolent aspect of the more benign Hathor. Thus, when Hathor went on a rampage against mankind, Ra referred to her as Sekhet.⁶ And that is the way Hathor's malignant character, as well as that of Isis, was remembered as it is actually documented in an Egyptian text from Philæ.⁷

As with Kali and Durga, Sekhet's slaughter was so complete that she ended up by flooding the Earth in blood. In both this myth and that of Anath, each respective goddess is described as wading up to her waist in gore. Once again, like both Shiva and Baal, Ra himself was forced to intervene and call the goddess back.⁸

Sekhet was invariably depicted as a woman with the head of a lioness,⁹ as so, also, were Ishtar¹⁰ and Tanit.¹¹ The Mahadevi, too, was associated with the lion.¹ And, to be sure, the

¹ V. Ions, op. cit., p. 94.

² E. Sachau, Aramaische Papyrus und Ostraka aus Judischen Militarkolonie zu Elaphantine (1911), p. xxv.

³ W. F. Albright, Yahweh and the Gods of Canaan (N.Y., 1968), p. 131.

⁴ Ibid.

⁵ *Ibid.*, p. 130.

⁶ As indicated in the Egyptian text known as "The Destruction of Mankind"—see E. A. W. Budge, *The Gods of the Egyptians*, Vol. I (N. Y., 1904/1969), pp. 388 ff., especially pp. 392 and 393 ff.

⁷ D. A. Mackenzie, Egyptian Myth and Legend (N. Y., 1907/1978), p. xxxviii.

⁸ B. van de Walle, "Egypt: Syncretism and State Religion," Larousse World Mythology (London, 1972), p. 40.

⁹ E. A. W. Budge, op. cit., facing pp. 514, 516, 517.

¹⁰ D. A. Mackenzie, Myths of Babylonia and Assyria (London, 1915), republished as Mythology of the Babylonian People (London, 1996), p. 19.

¹¹ L. E. Stager & S. R. Wolf, "Child Sacrifice at Carthage—Religious Rite or Population Control," *Biblical Archaeology Review* (January/February 1984), p. 48.

¹ R. S. Gupte, Iconography of the Hindus, Buddhists and Jains (Bombay, 1972), pp. 102, 104.



Sekhet/Sekhmet with her feline head topped by a planetary disk.

association of the lion and/or lioness with the planet Venus was earlier noted by Francis Xavier Kugler. As Livio Steechini noted:

"Kugler observed that this association of Venus with Leo [the lion] must have had a momentous meaning for the ancients, since the several goddesses that represent Venus, such as the Phrygian Cybele, the Greek Great Mother, the Carthaginian Coelestis [Cælestis], had the lion as an inseparable companion."

But then we also find Ninurta unmistakably lauded as a "Lion-Head," while Nergal found fame as "the mighty Lion-head of Enlil." James Kinnear Wilson notwithstanding, the identification of Ninurta and Enlil as the proto-Saturnian deity needs no further elaboration. All of which ends up associating not only the ancients' Venus goddesses, but the planet Venus itself, with the god, and therefore, planet, Saturn.

Not to be confused with Kāla, that is Time, the name Kali means "black." As Kali Ma she turns into the Black Mother, and as such is she usually portrayed. It will be claimed by some that this does not compliment the Mahadevi's character as "resplendent light," and yet, half way across the world, we come across the Navajo whose Black God is described as the very creator of bright light. That the Black God referred to proto-Saturn, and that his shedding of blue-black light referred to his ultraviolet radiation, has been documented in the prequel to this volume. So this, again, associates the Venusian goddess with the proto-Saturnian deity. What Venus had to do with proto-Saturn's radiation will be discussed in an upcoming chapter of this very work.

And there is more.

SHODASHANABHUJA

One direct connection presented by Isenberg between the Mahadevi and the planet Venus is in the number sixteen. In Sanskrit the planet Venus is *inter alia* rendered *shodashanarchis* and/or *shodashananshu*, both designations meaning "sixteen rayed." It is noteworthy that no other heavenly body is known to the Hindus as "having sixteen rays."

What can hardly be a coincidence is the additional fact that the Mahadevi, as Durgadevi,

¹ L. C. Stecchini, "Astronomical Theory and Historical Data," in A. de Grazia (ed.), *The Velikovsky Affair* (N. Y., 1966), p. 143.

² J. V. K. Wilson, *The Rebel Lands* (Cambridge, 1979), p. 40.

³ Ibid.

⁴ See his interpretation of Mesopotamian deities as having originated in the forms assumed by columns of burning gas in Near Eastern oilfields throughout *ibid*.

⁵ W. D. O'Flaherty, *Hindu Myths* (Harmondsworth, 1976), p. 345.

⁶ P. Masson-Oursel & L. Morin, "Indian Mythology," New Larousse Encyclopedia of Mythology (London, 1972), pp. 332, 335.

⁷ A. F. Aveni, "Astronomy in Ancient Mesoamerica," in E. C. Krupp (editor.), In Search of Ancient Astronomies (N. Y., 1977), p. 174.

⁸ D. Cardona, Metamorphic Star (Oregon, 2011), pp. 213 ff.

⁹ A. Isenberg, op. cit., p. 96.

¹⁰ V. S. Apte, The Student's Sanskrit English Dictionary (Delhi, 1959), p. 570.

is known as Shodashanabhuja, which means "sixteen armed." And while, in her aspect as Shoashi, she is invoked as the "girl of sixteen," Hindu astrology gives the "age" of Venus as "sixteen years."

An additional association of Venus with Saturn comes our way when we learn that, as an embodiment of the year, Prajapati is also known as consisting of "sixteen parts,⁴ while Shiva continues to be lauded as "having sixteen limbs." As with Ninurta and Enlil, the identification of Prajapati and Shiva as separate aspects of the Saturnian deity needs no additional evidence. Actually, that Prajapati stood for the lord Saturn had already been established by Manfred Mayrhofer in 1963. True enough, in other sections of the Satapatha Brahmana, Prajapati is presented as a seventeen-fold entity, but, as Roger Ashton has indicated, this seems to be the result of adding the sixteen parts to Prajapati himself. In the meantime we can add that Brahma, too, is said to consist of "sixteen parts."

GAURI

There is then Gauri whom David Kelly had no qualms in presenting as "the goddess who rules the planet Venus." In her aspect of Jagan-mata—that is, Mother of the World—Gauri is best known as the wife of Shiva as well as of Varuna, 11 both aspects of Saturn, which continues to associate the goddess with that particular planet. Yet even so, none of the above evidence is enough to tell us whose offspring she really was.

SHADY ORIGINS

The Markandeya Purana and the Skanda Purana both describe the goddess as having been born from the combined light and/or energy that issued forth from the major Indic deities. Additionally, the Skanda Purana gives a second version in which, instead of their combined energy, the gods supply her with their weapons. The Mahabharata speaks of the goddess as the daughter of Yasoda, wife of the cow-herd Nanda, and foster mother of Krishna. In all of this Isenberg had to confess that he could find absolutely no relationship between the Mahadevi and the planet Jupiter. Can a connection, instead, be accounted for

¹ Ibid.

² A. Danielou, Hindu Polytheism (N. Y., 1965), p. 278.

³ A. Isenberg, loc. cit.

⁴ Satapatha Brahmana, IX: 2: 2: 2.

⁵ Linga Purana, 53: 53.

⁶ M. Mayrhofer, Kurzgefasstes Etymologisches Worterbuch des Altindischen, Vol. II (Heidelberg, 1963), p. 355.

⁷ Satapatha Brahmana, V: 1: 5: 6; V: 2: 1: 7; V: 2: 1: 17; XIII: 4: 1: 15.

⁸ R. Ashton to L. M. Greenberg, private communiqué (May 28, 1981).

⁹ Shvetashvatara Upanishad, I: 4.

¹⁰ D. H. Kelly, "The Nine Lords of the Night," Contributions of the University of California Archaeological Research Facility, No. 16 (October 1972), p. 60.

¹¹ *Ibid.*, p. 66

¹² Skanda Purana, III: 1: 6: 8-42; Swami Jagaddisvarananda, op. cit. pp. 25 ff.

¹³ Skanda Purana, I: 3: 1: 10: 1-69.

¹ A. Isenberg, op.cit., p. 100.

² *Ibid.*, p. 96.

between this goddess and Saturn?

Let us, first of all, examine the age of the Mahadevi's mythographies. While agreeing with most Indologists that the contents of the Puranas derive from greater antiquity, as literary works they are very late sources, later by far than the works of Hesiod and Homer. The Markandeya Purana, which contains some of the best material on the Mahadevi, has been said to date somewhere around the 10th century A. D. The Mahabharata, which includes some earlier references, has been dated by some scholars as early as 500 B.C., but it is conceded that the work did not appear in its present form until 500 A.D. The earlier Vedas, which are generally dated to 1500 B.C., contain no mention of the Mahadevi. Isenberg has therefore concluded that the goddess "is clearly post-Vedic." The Sanskrit scholar, Wendy O'Flaherty, however, does not agree. On the contrary she has stated that: "The Goddess has been worshipped in India from prehistoric times, for strong evidence of a cult of the Mother has been unearthed at the pre-Vedic civilization of the Indus Valley (c. 2000 B. C.)"

That is also the opinion of the Indologist Veronica Ions:

"Devi, or Mahadevi...is the most complex and the most powerful of the goddesses. She owes both characteristics to the combination of her ancestry in the great mother of *pre-Aryan times*..."⁵

O'Flaherty is of the opinion that the Mahadevi is actually a composite figure who owes her origin to much earlier female divinities:

"Her assimilation into the Hindu pantheon...took place...in two distinct phases: first the Indo-Aryan male gods were given wives, and then...these shadowy female figures merged into the Great Goddess."

Also:

"...female divinities had served as the objects or instruments of divine struggles from the earliest times...But when the Goddess came into her element in the medieval period these early myths were retold in a new light..."

The one concept we do not agree with is that the goddess achieved her significance through the importance that was *later* bestowed on her as the male deity's consort. As we aim to show, while the goddess did not always exist, she became a prominent member among the deities of antiquity right after her birth, and only later did she wed the primal god.

¹ J. Dawson, A Classical Dictionary of Hindu Mythology and Religion (London, 1879), p. 204.

² A. Isenberg, op. cit., p. 101.

³ Ihid

⁴ W. D. O'Flaherty, op. cit., p. 238 (emphasis added).

⁵ V. Ions, *Indian Mythology* (London, 1967), p. 91 (emphasis added).

⁶ W. D. O'Flaherty, loc. cit.

⁷ *Ibid.*, (emphasis added).

Chapter 24

Egyptian Interconnections

HATHOR

ekhet was not the only Egyptian goddess associated with the planet Venus. As we have already noted, Sekhet was only the malign aspect of Hathor. Thus, besides the evidence we have already supplied, there is also a specific chant contained in an extant temple inscription in which Hathor is lauded as having "overcometh the enemy...by this her name of Sekhet." Much like her destructive alter ego, Hathor, too, was often represented with a planetary disk atop her head.

There have been those who have spoken of Hathor as having definitely represented the planet Venus,² even though no extant texts corroborate the identification. The best that can be said in this respect is that the Greeks identified Hathor with their own Aphrodite and, as Wallis Budge indicated, "there are many passages in the Egyptian texts which show that they were justified in doing so."³

Among her various aspects, mythologists have represented Hathor as the daughter of Ra,⁴ and although original textual evidence on this matter remains somewhat ambiguous, this relation is not uncalled for. As is well known, Ra has unfortunately been represented by most mythologists as the Sun, but that he represented Earth's proto-Saturnian stellar host need not be repeated.

Very much like the Indic Mahadevi, Hathor was, by the Egyptians themselves, identified with various other goddesses the naming of which need not involve us in the cosmic events we are endeavoring to reconstruct.⁵ As Budge informs us:

"The forms in which the goddess is depicted are numerous, but this is not to be wondered at, because during the course of the dynastic period she was identified with every important local goddess, and all their attributes, of whatever class and kind, were ascribed to her."

R. Van Over, Sun Songs: Creation Myths From Around the World (N. Y., 1980), p. 261.

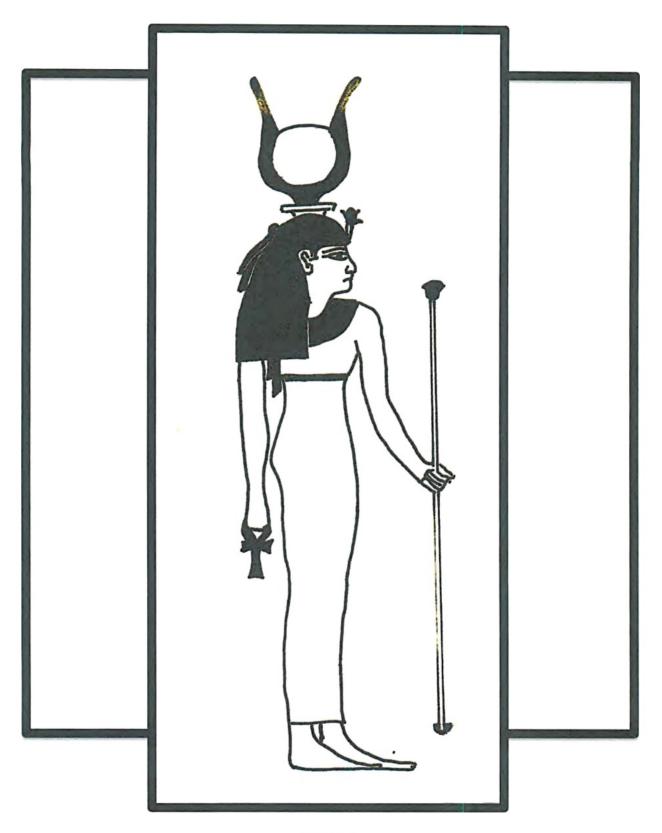
² See, for instance, M. Sieff, "The Road to Iron: 8th and 7th Century Metallurgy and the Decline of Egyptian Power," *Catastrophism and Ancient History*, Vol. IV, Part 2 (July 1982), pp. 127, 132; E.Cochrane, "The Eye Goddess," *AEON*, Vol. V, No. 5 (January 2000), p. 52.

³ E. A. W. Budge, *The Gods of the Egyptians*, Vol. I (N. Y., 1904/1969), p. 435; see also I. Fuhr, "On Comets, Comet-Like Luminous Apparitions and Meteors," *KRONOS*, Vol. VIII, No. 1 (Fall 1982), p. 38.

⁴ J. Viaud, "Eyptian Mythology," New Larousse Encyclopedia of Mythology (London, 1972), p. 23; F. Fleming, "Living With the Gods," in T. Allan (ed.), The Way to Eternity (London, 1997), p. 60

⁵ See here E. A. W. Budge, op. cit., pp. 431-432.

¹ *Ibid.*, p. 428.



Hathor

There is, however, one particular goddess with whom she was identified that we must definitely take into consideration. As Hathor herself is made to state, she is Isis, to whom we shall next turn our attention. As Richard Payne Knight asserted long ago: "Isis, Hathor, Aphrodite, and Venus are all one and the same personage."

BACK TO ISIS

Let it be stated right from the start that, very much like Hathor, Isis, whom we have already discussed in relation to agriculture, is in no Egyptian text identified as Venus. That she was a stellar deity, however, is well recognized,³ and in her representation as a heifer, she was actually endowed with a star between her horns.⁴

That Isis has been identified by the Egyptians themselves with their star Sopdet, the Greek Sothis, also known as the Bow Star and/or Dog Star, now better known as Sirius, we have already demarcated.⁵ And so, likewise, that Sothis, and therefore Isis, was venerated as a surrogate for Dilbat, the Sumerian name for the planet Venus.

Additional to that, we can cite the Roman writer Gaius Plinius Secundus, popularly known as Pliny the Elder, as well as the Graeco-Egyptian astronomer Claudius Ptolemaeus, popularly known as Ptolemy, both of whom outrightly claimed that Isis *did* personify Venus.⁶

Unfortunately, as was the case with both Aphrodite and Athena, Isis, too, was supplied with more than one father. Thus, for instance, Diodorus Siculus tells us that Isis was begotten by Zeus, while others claimed her as the offspring of Kronos. And yet, in an Abydos chant, Isis refers to herself as the offspring of Osiris.

To make matters even more confusing, Isis was also proclaimed to have been the daughter of Geb and Nut, who were Atum-Ra's grand-children, thus making her Ra's great-grand-daughter.¹⁰

As if all the above is not confusing enough, we come across the notion that, as Donald Mackenzie informs us: "The Great Mother deity was believed [at least by some] to be self-created and self-sustaining." Thus, in one chant, Isis is proclaimed to have actually "begotten herself."

One thing that is to us quite noticeable, however, is that, Kronos and Osiris are both identifiable as the proto-Saturnian deity. Even when it comes to Zeus, Diodorus Siculus

¹ Coffin Text 177.

² R. P. Knight, Symbolical Language of Ancient Art and Mythology (N. Y., 1836), p. 35.

³ See, for instance, E. C. Krupp, Beyond the Blue Horizon (N. Y., 1991), p. 218.

⁴ D. A. Mackenzie, Egyptian Myth and Legend (N. Y., 1907/1978), p. 141.

⁵ See here, also, M. Müller, Egyptian Mythology, Vol. XII of The Mythology of All Races (Boston, 1918), p. 55; M. O. Howey, The Cults of the Dog (Rochford, Essex, England, 1972), p. 50.

⁶ Pliny, Natural History, II: 37.; Ptolemy, Tetrabiblos, II: 3.

⁷ Eusebius Pamphili, Evangelicae Praeparationis, XV: II: 1d.

⁸ Ibid.

⁹ D. A. Mackenzie, op. cit., p. 27.

¹⁰ B. van de Walle, "Egypt: Syncretism and State Religion," *Larousse World Mythology* (London, 1972), p. 31; J. Viaud, op. cit., p. 11.

¹¹ D. A. Mackenzie, op. cit., p. xxxv.

¹² Ibid.

named him in lieu of the Egyptian Amon¹ with whom the Greeks misidentified him.² One even wonders whether Hesiod's claim that Athena sprang from the head of Zeus might owe itself to an early Hellenistic acquaintance with Amon. As is known, the Egyptians themselves merged Amon with Ra in a single god whom they simply referred to as Amon-Ra, or Amen-Ra.³ Need more be said?

According to various texts, including the *Treasury of Hor*, one other deity that was said to have fathered Isis was the God Thoth.⁴ Most mythologists will vouch for the identification of Thoth as the Greek Hermes,⁵ who was the Roman Mercury, while some even saw him as the Moon.⁶ The Hermopolitan doctrinal system, however, presented him as the Demiurge who accomplished Creation by the sound of his voice.⁷ He was also, very much like other Saturnian deities, said to have been "self-created, to whom none hath given birth."

Thoth's original Saturnian identity is additionally vouched for in his assimilation to Ra or Re. Thus, in Utterance 406 of the *Pyramid Texts* the god is lauded with the following words: "Hail, O Re, in your beauty, your splendor...in your radiance...when you go forth as Thoth."

There is then Geb and Nut who, as we have seen, were also said to have given birth to Isis. Most mythologists have accepted Geb's identification as an earth-god, with Nut as the goddess of the sky. ¹⁰ Plutarch, however, had no doubts that Geb was actually Kronos, although rendered Cronus, ¹¹ whose Saturnian identity is now well known. Even so, I need be honest in stating that, while they will be found to have prime associations with the proto-Saturnian sun, Geb and Nut were not exactly Saturn and the sky. But let that be for now.

What lies behind all this complexity is the unification of what were once separate cults—the Heliopolitan, Hermopolitan, Memphite, and Theban systems—into a single religious orthodoxy in which many of the original priestly sectarians continued to vie for the supremacy of their primal dogmas. As William Mullen aptly phrased it:

"One cause for the complexity of the account is that when the Nile valley was united in one kingdom, it consisted of many tribes, each with its own names for the planetary gods and its own stories about them. After unification the cults of these gods were preserved and conflated even though in many cases one and the same planet was being worshipped under different names in different places." 12

¹ Eusebius Pamphili, op.cit., XV: II: 1c.

² Herodotus, *Historiae*, II: 42; Diodorus Siculus, *Bibliotheca Historica*, I: 13: 2.

³ E. A. W. Budge, op. cit., Vol. II (N. Y., 1904/1969), p. 7; idem, An Egyptian Hieroglyphic Dictionary, Vol. I (N. Y., 1920/1978), p. 350.

⁴ M. Bernal, Black Athena, Vol. I (New Brunswick, 1988), p. 139, where other sources are cited.

⁵ E. A. W. Budge, The Gods of the Egyptians, Vol. I (N.Y., 1904/1969), p. 414.

⁶ M. Lichtheim, Ancient Egyptian Literature—Volume 1: The Old and Middle Kingdoms (Berkeley, California, 1975), p. 43.

⁷ J. Viaud, op. cit., p. 27.

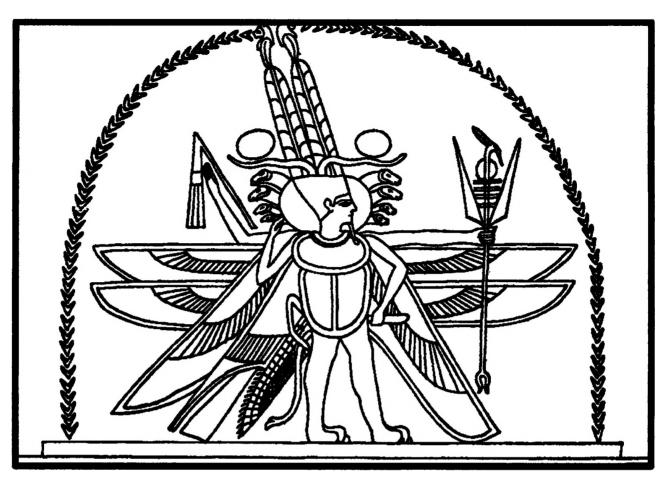
⁸ E. A. W. Budge, op. cit., pp. 400-401

⁹ M. Lichtheim, loc. cit.

¹⁰ J. Viaud, op. cit., pp. 14, 15.

¹¹ *Ibid.*, p. 14.

¹² W. Mullen, "A Reading of the Pyramid Texts," *Pensée*, IVR III (Winter 1973), p. 13.



Amon-Ra

In the end, the cogency of mythic interpretations and the identifications they lead to it is best validated by comparing the mytho-historical records of different ancient civilizations. These can then be further justified by seeing how well they fit into whatever hypothesis they are being used to authenticate. In our case this amounts to a convergence with our postulated proto-Saturnian configuration and the cosmic events it went through.

NEITH

The identification of Isis as the Greek goddess Athena needs no further corroboration. Plato, however, tells us that Athena was also identified with the Libyan goddess Neith, whom the Egyptians adopted as one of their own. As Martin Bernal informs us, the ancients saw Neith and Athena as "two names for the same deity." Sigmund Freud, as Ev Cochrane noted,

¹ D. Mallet, Le Culte de Neit à Saïs (Paris, 1888), p. 189; R. Graves, The Greek Myths, Vol. I (Harmondsworth, 1964), p. 44; M. Bernal, op. cit., p. 51.

² *Ibid.*, p. 52.

regarded Athena as having been derived from Neith, which concept has more recently been revived by Bernal.² And yet, as Budge continues to inform us, "Neith was one of the oldest of all the Egyptian goddesses, and it is tolerably certain that her worship was widespread even in predynastic times." Rightly or wrongly, Neith has even been stated to have been the highest among the goddesses of Egypt.4

As far as the Egyptians were concerned—and, at this point, this should come as no surprise—Neith was identified as Isis,⁵ and also Hathor,⁶ all three of whom shared the same attributes. That Neith, very much like Isis and Hathor, can likewise be seen as yet another personification of the planet Venus should therefore also come as no surprise.

When it comes to Neith's parentage, however, we run into more than one ambiguity. Robert Graves tells us that Neith "belonged to an epoch when fatherhood was not recognized." However, whether that particular concept of Graves is correct I will leave for others to decide. Even so, the texts of Unas do proclaim her to have been self-produced.9

An inscription on a sarcophagus from Saqqara, however, declares her to have come "forth" from Ra. 10 And yet, to be sure, we find it also proclaimed that, rather than being Ra's daughter, Neith was actually his mother, 11 having brought the god into existence without the aid of a husband. 12

As the daughter of Ra, together with the other Venusian deities we have thus far discussed, Neith is identifiable as Saturn's offspring. Her role as Ra's mother will have to be discussed in a future volume.

¹ E. Cochrane, in his review of Y. H. Yerushalmi's Freud's Moses, in AEON, Vol. III, No. 4 (December 1992), p.

² M. Bernal, op. cit., Vol. II (New Brunswick, 1991), pp. 86 ff.

³ E. A. W. Budge, op. cit., p. 450, but see also p. 453.

⁴ T. W. Doane, Bible Myths and Their Parallels in Other Religions (N.Y., 1882), p. 476.

⁵ E. A. W. Budge, op. cit., pp. 451, 454; D. A. Mackenzie, op. cit., p. 39.

⁶ F. G. Bratton, Myths and Legends of the Ancient Near East (N. Y., 1970), p. 66. 7 Ibid.

⁸ R. Graves, op. cit., p. 44, and see also p. 28.

⁹ D. A. Mackenzie, op. cit., p. 235.

¹⁰ E. A. W. Budge, op. cit., p. 454.

¹¹ *Ibid.*, pp. 454, 458, 463, 464.

¹² Ibid., p. 462.

Chapter 25

Near Eastern Confirmations

THE BEGETTER OF ANAT

Thile, as we have noted, there is a possibility that the Libyan Neith developed into the Greek Athena, there is also a strong probability that Neith herself derived from the West Semitic deity named Anat.¹ It has been considered by some that a variant of Anat, which can also be rendered as Anath, is Anahita, but most consider them as two separate goddesses, and for simplicity's sake in what follows so will we.

The case for Anat is straightforward enough. For one thing, as Immanuel Velikovsky pointed out, a Cyprian inscription identifies Anat with the Greek Athena.² Anat's Venerian identity need not, however, rest on that. Quite a bit about the goddess is known from a series of tablets that were discovered at Ras Shamra, the ancient Ugarit, in a priest's house adjoining the temple of Ba'al.³ In one of these tablets, Anat is unmistakably referred to as a star.⁴ Yet another one of these tablets describes a sacrifice that took place "when the morning star [appeared] before the sanctuary of the virgin Anat." These two items imply that it was the planet Venus as the morning star that was symbolized by the goddess Anat.

We must then ask: Whose child was Anat? The answer to that question is not hidden. As William Albright explained: "The figure of Anath can be better understood in the light of several Egyptian accounts of the goddess, unquestionably translated from an original Canaanite myth, to judge from words and idiomatic expressions." In one of these Egyptian accounts, Anat's father is alluded to as Re (or Ra). The identification of Ra as the planet Saturn rather than the Sun as most mythologists continue to misinform was actually known to the Egyptians themselves.

Let no one now surmise that the Egyptians may have incorrectly identified Anat's Canaanite father as their own Ra. In the Ugaritic pantheon itself, Anat was considered to have been the daughter of El, whose identity as Saturn should be well known to the readers of this volume and its prequels.

¹ M. Bernal, Black Athena, Vol. I (New Brunswick), p. 51.

² I. Velikovsky, quoting E. Sachau, Worlds in Collision (N. Y. 1950), p. 297.

³ J. Gray, Near Eastern Mythology (London, 1969), p. 78.

⁴ J. Aistleitner, Die Mythologischen und Kultischen Texte aus Ras Shamra (Budapest, 1959), p. 40.

⁵ L. Delaporte, "Phoenician Mythology," New Larousse Encyclopedia of Mythology (London, 1972), p. 77.

⁶ W. F. Albright, Yahweh and the Gods of Canaan (N. Y., 1968), pp. 128-129.

⁷ *Ibid.*, p. 129.

⁸ F. Boll, "Kronos-Helios," Archiv für Religionwissenschaft, XIX (1916-1919), p. 343.

⁹ F. G. Bratton, Myths and Legends of the Ancient Near East (N. Y., 1970), p. 110; H. Shanks, "Goddess Cleared of Cannibalism," Biblical Archaeology Review (January/February 1998), p. 22.

ANAITIS

Anahita—which name is also transliterated as Anahid—was a Persian goddess who was also known by the Greeks as Anaitis, and she, too, was equated with their own Athena, as so, likewise Aphrodite. Her identification as Venus is thus understandable. Most mythologists do, in fact, accept the identification of this goddess as the planet Venus.

Even so, one could ask: Where is it *directly* stated that Anahita, or Anaitis, was the Iranian or Persian name for the *planet* Venus? To be sure, we need not seek far. As it is stated in the Zoroastrian cosmologic work known as the *Bundahish*, the planet in question was known by the very name of Anahid.⁴

There will be some who will contest this derivation since the work in question cannot be dated earlier than 651 A.D., ⁵ so that some of the identifications contained within its pages might be corrupt. And, truth be known, the very same *Bundahish* also presents Anahid as the "angel" of the waters. This "angel," however, seems to have been more popularly known by the name Avan (or Aban). And, in any case, that does not, in itself, contradict the equation of Anahid as the planet Venus. That this planet was considered an "angel" is in keeping with Persian cosmology since so, also, were Vahram (Mars), Tir (Mercury), and Mah (the Moon). Persian "angels," however, must not be confused with Biblical ones. The Persian *Izeds*, translated as "angels," were more correctly genii, that is tutelary spirits rather than the messengers that the word "angels" usually connotes. Mythologists, in fact, no longer refer to these Persian entities as "angels."

As the personification of the waters, Anaitis is more generally known by the epithet of ardvi sura, ¹² and is now recognized as the goddess, rather than the angel, of the waters. ¹³ This aspect of the planet, to be discussed in its proper sequence, was also endorsed by the Assyro-Babylonians who held the theological view that Ishtar, who was their Venus, was the goddess of the fertilizing waters. ¹⁴

¹ F. Cumont, Les Mystères de Mithra (Paris, 1913), p. 111.

² I. Fuhr, "On Comets, Comet-Like Luminous Apparitions and Meteors," Part II, KRONOS, Vol. VIII, No. 1 (Fall 1982), p. 49, where various other sources are cited.

³ P. Masson-Oursel & L. Morin, "Mythology of Ancient Persia," New Larousse Encyclopedia of Mythology (London, 1972), pp. 311, 313; C. Huart, "The Mythology of Persia," Asiatic Mythology (N. Y., 1972), pp. 38, 42

⁴ Bundahish, 5: 1.

⁵ E. W. West, *Pahlavi Texts*, Part I, in M. Müller (Ed.), *The Sacred Books of the East*, Vol. V (Oxford, 1880), p. xli.

⁶ Bundahish, 32: 8.

⁷ Ibid., 27: 24, Shayast La-Shayast 22: 10, 23: 2.

⁸ Bundahish, 27: 24; Bahman Yast, 3: 32; Shayast La-Shayast, 22: 20; 23: 3.

⁹ Bundahish, loc. cit.; Shayast-La-Shayast, 23: 2.

¹⁰Bundahish, loc. cit.; Shayast La-Shayast, 12: 8, 22: 12; 23: 2.

¹¹ See here, D. Cardona, "The Archangels," KRONOS, Vol. VIII, No. 2 (Winter 1983), p. 31.

¹² E. W. West, op. cit., p. 144.

¹³ J. de Menasce, "Persia: Cosmic Dualis," *Larousse World Mythology* (London, 1972), p. 193; P. Masson-Oursel & L. Morin, "Mythology of Ancient Persia," *New Larousse Encyclopedia of Mythology* (London, 1972), p. 313.

¹⁴ W. F. Albright, "The Mouth of the Rivers," The American Journal of Semitic Languages and Literatures, XXXV:4 (July 1919), p. 184.

We can therefore accept the *Bundahish*'s identification of Anaitis as the Goddess of the planet Venus with impunity. Actually, this particular equation is well known and has been recognized for quite some time. Besides which, the etymological and historical roots of this goddess also point unmistakably to Venus. In fact, let us at this point ask: Whence came this planetary deity whose idolatrous character is so foreign to the teachings of Zarathustra as expounded in the *Avesta* and the later *Bundahish*?

Strabo referred to Anahita by the name Anaea.² A slightly earlier form was Nanaea, which is the name of the goddess as used by the author of the Second Book of *Maccabees*.³ This latter name continued to be used by the Persians themselves down to the Sassanid period, for Nanaea is found mentioned on Sassanian coins.⁴ It has, of course, been quite obvious for some time that Nanaea was merely a different rendering of the Babylonian Nana,⁵ who is also quite known to have been the goddess of the planet Venus.⁶

None of this should surprise us since it is no secret that the Persians based their astral lore on Chaldean astrology. But here is the problem: There seems to be nothing in extant Persian and/or Iranian sources that even hints at Anahita's parentage. We are therefore forced to seek her lineage through Nana, her Babylonian precedent.

SIN

Nana, needless to say, was the same as the earlier Sumerian Inanna (Innanna, Innana, Ninanna, Ininni), whom we have already met on an earlier page of this work where we offered various sources in relation to her identification as the very same planet Venus. As it is noted in Sumerian hymns, Inanna was the daughter of Suen—alt., Zuen—more commonly known as Sin. Now check just about any work on Near Eastern mythology and you will find it consistently stated that Sin was the godly representative of the Moon. Because Sin was additionally known as Nanna and/or Nannar—not to be confused with Nana and/or Inanna—so, also, has this deity been identified.

There had, however, been problems with this identification from day one since there had always been too much about Sin that noticeably ties the god to Saturn. Despite the confused

¹ G. Rawlinson, The Seven Great Monarchies of the Ancient Eastern World, Vol. II (N.Y., 1884), p. 427.

² Strabo, Geography, XVI: 1: 4.

³ II Maccabees, 1: 13: 5.

⁴ G. Rawlinson, op. cit., Index p. 100.

⁵ *Ibid.*, main text p. 427.

⁶ *Ibid.*, Vol. I, p. 90.

⁷ P. Masson-Oursel & L. Morin, op. cit., p. 311.

⁸ See also S. H. Langdon, Semitic Mythology, Vol. V of C. J. A. MacCulloch (ed.), The Mythology of All Races (N. Y., 1931/1964), pp. 5, 14, 108-109; P. Vitebsky, "A Divine Realm," in T. Allan (ed.), Epics of Early Civilization (London, 1998), p. 36.

⁹ B. Newgrosh, "The Case for Catastrophe in Historical Times," *KRONOS* (Fall 1985), pp. 7, 8; F. Bruschweiler, *Inanna* (Leuven, 1988), p. 107 as quoted by E. Cochrane, "Heracles as Cross-Dresser," *AEON* (August 2003), p. 61.

¹⁰ M. Jastrow, Jr, *The Civilization of Babylonia and Assyria* (Philadelphia, 1915), p. 222; S. H. Langdon, op. cit., p. 92; S. N. Kramer, *Sumerian Mythology* (Philadelphia, 1961), p. 47; E. C. Krupp, *Beyon the Blue Horizon* (N. Y., 1991), p. 68.

manner in which they presented it, this was recognized by two early mythologists, Hodder Westropp and Staniland Wake, in their discussion of Sin's association with what they themselves alluded to as "the primeval Saturn." This association continued to be promoted for quite some time, even if those concerned with the identification continued to confuse the evidence that leads to it.²

The reason behind Sin's misidentification as the Moon stems mainly from the fact that he was often represented as a crescent which his title of Udsar actually means.³ As Ev Cochrane rightly pointed out, judging by ancient literature that spans various lengths of time, Sin eventually *did* begin to be identified as the Moon, but he definitely did not do so in the far distant past.⁴ Back during the proto-Saturnian events we are investigating, the Moon was not even visible in the sky.

The confusion concerning the identification with the Moon is highlighted by the Egyptian god Khonsu, also known as Khensu, another deity that has been identified as our lunar neighbor by most mythologists. And yet, not only was Khonsu said to be the same as Ra,⁵ but he was shown to be wearing both the crescent and a disk upon his head.⁶ Most mythologists could thus speak of Khonsu as having been crowned with both the Moon and the solar orb,⁷ despite the obvious incongruity. Thus, for instance, was the crescent depicted, as if upholding a disk within its enfolding curvature, above a pair of supplicating arms, on a stela that was found at Hazor.⁸ This and similar items have been described as hands reaching "for the symbol of the moon god, a disc within a crescent, representing the full moon and the crescent moon." But what, then, can be said when a star is additionally placed in the middle of the central disk within the crescent? The following is what one mythologist has stated about the matter:

"From UR III times onwards...the crescent is also often combined with a disc inscribed with a star which is placed within it...This could either be explained as different phases of the moon or, more likely, is a shorthand for the principle celestial bodies, sun (and star?) and moon."¹⁰

But why would a star within a crescent be utilized to represent different phases of the Moon? Or why would the "principle celestial bodies" of the Sun, the Moon, and the stars, be represented as a single figure?

As Ev Cochrane has stated: "Far from being confined to ancient Mesopotamia," the star within a crescent "has proved to be one of the most enduring and popular images in all the

¹ H. M. Westropp & C. S. Wake, Ancient Symbol Worship (N. Y., 1875), p. 62 (italics as given).

² A. Jeremias, Handbuch der Altorientalischen Giesteskultur (Leipzeg, 1913), p. 96.

³ S. H. Langdon, op. cit., p. 152.

⁴ E. Cochrane, "Mons Veneris," AEON (November 1996), p. 71.

⁵ E. A. W. Budge, The Gods of the Egyptians, Vol. II (N. Y., 1904/1969), pp. 35-36.

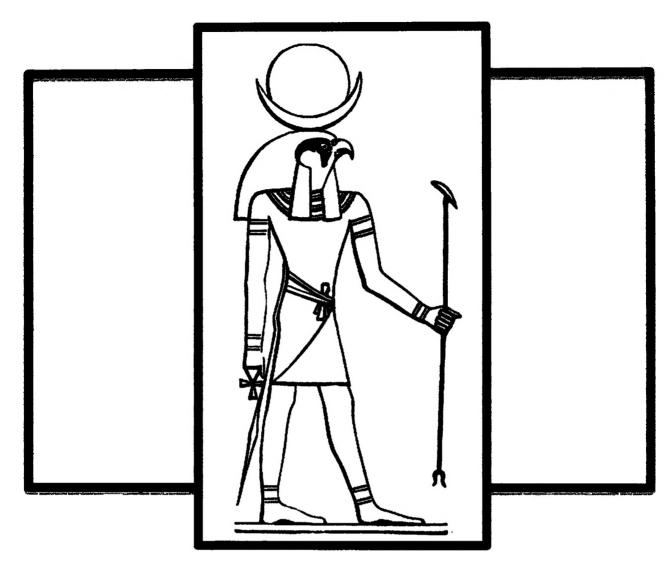
⁶ *Ibid*, p. 36.

⁷ D. A. Mackenzie, Egyptian Myth and Legend (N. Y., 1907/1978), p. 203

⁸ B. A. Nakhai, "What's a Bamah?" Biblical Archaeology Review (May/June 1994), p. 21.

Ibid., p. 20.

¹⁰ D. Collon, as quoted by E. Cochrane, The Many Faces of Venus: The Planet Venus in Ancient Myth and Religion (Ames. Iowa, 2001), pp. 57-58.



Khonsu with both crescent and disk atop his head.

world, still serving as the sacred symbol of Islam." This is so true that we even find the star within a crescent in a pictograph from Abo in New Mexico.²

Bradley Schaefer was at least honest enough when he stated that:

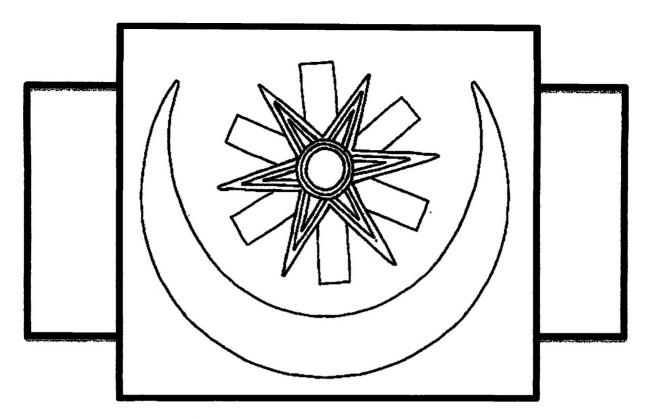
"The star and crescent is one of the most common astronomical symbols in the world. Its origin is a mystery."

Now while a star within the embrace of a crescent became quite popular in succeeding ages, what was originally shown within the crescent in the earliest Sumerian and Assyro-Babylonian depictions was not a star, but the symbol of the radiating Shamash. And since,

¹ E. Cochrane, loc. cit.

² A. Patterson, A Field Guide to Rock Art Symbols of the Greater Southwest (Boulder, Colorado, 1992), p. 147.

³ B. E. Schaefer, "Heavenly Signs," New Scientist (December 1981), p. 48, also quoted by E. Cochrane, loc. cit., p. 57.



The radiating symbol of Shamash set within a recumbent crescent. (Illustration from a Mesopotamian stela courtesy of Richard M. Smith.)

contrary to what the ancients themselves had stated, Shamash continues to be misunderstood as a representation of Earth's present Sun, this, too, continues to cause confusion among most mythologists. I say "most mythologists" because there have been some who have correctly realized that Sin's crescent was actually an aspect of Saturn.

Shamash was not the only ancient Saturnian deity associated with the crescent. In Egypt, Saturn was called Heru-ka-pet, translatable as "Horus, Bull of Heaven," and represented as a bull-headed entity crowned with a recumbent crescent. Among the Hindus we meet the crescent-crested—usually described as moon-crested—lord Shiva. We also come across the two-headed Janus who is likewise represented with a reclining crescent atop his head. That both Shiva and Janus personified the proto-Saturnian deity need not be repeated. In any case, that these deities did not represent the Moon is admitted by just about one and all, and so the question remains: Why are these gods associated with a reclining crescent? But then, one may also ask: What has a crescent, reclining or otherwise, to do with the planet Saturn?

¹ R. C. Thompson, The Reports of the Magicians and Astrologers of Nineveh and Babylon, Vol. II (London, 1900), p. xxv; P. Gossman, Planetarium Babylonicum (Rome, 1950), pp. 41-57.

² P. Jensen, Die Kosmologie der Babylonier (Strassburg, 1890), p. 191; A. Jeremias, loc. cit.

³ E. A. W. Budge, op. cit., pp. 302-303.

⁴ *Ibid.*, p. 303.

⁵ Linga Purana, I: 52: 24.

⁶ A. S. Murray, Manual of Mythology (N. Y., 1950), p. 147.



The radiating Shamash within crescent from a Babylonian seal.
(Illustration by Marie-Josèphe Devaux.)

As viewed from Earth's perspective, a Saturnian crescent is presently impossible to be seen. Only planets and satellites orbiting between Earth and the Sun can exhibit a crescent. Other than the Moon, that merely leaves Mercury and Venus.

However, during the era we have now reached in our progressing series of primeval events, proto-Saturn would have been moving ever closer to the Sun. It would by then not only have developed a crescent, but, as seen from an Earth that was much closer to Saturn than it is at present, this crescent would have eventually developed into such magnificence that it would have awed—for I can think of no better word—all those who looked upon it.

Among various other matters, however, Sin's identity as proto-Saturn is further indicated by his assimilation to Anu, whose identity as Saturn also needs no further corroboration. For that reason, Inanna was also known as An's, or Anu's, daughter. She was, in fact, said to have been *created*, that is given birth, by Anu.

ENLIL-ENKI-EA

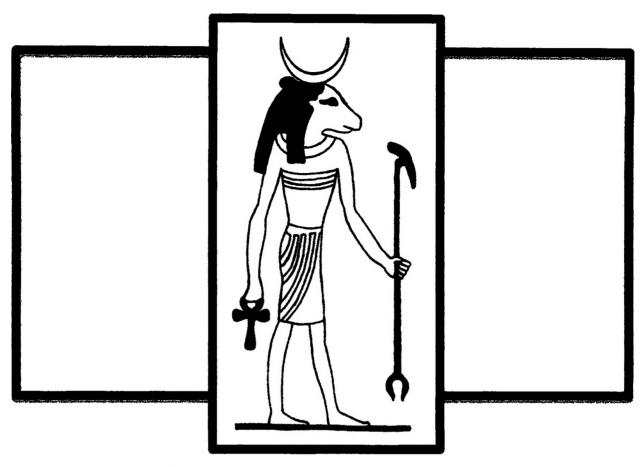
In another Sumerian hymn, Inanna is proclaimed to have been the daughter of Enlil. "My father gave me the heavens...I am Inanna...I am father Enlil's splendid wild cow." But then she was also venerated as a daughter of Amanki, the same as Enki, where, in yet another hymn

¹ D. A. Mackenzie, Myths of Babylonia and Assyria (London, 1915), republished as Mythology of the Babylonian People (London, 1996), p. 52.

² P. Jensen, Die Kosmologie der Babylonier (Strassburg, 1890), p. 191; S. Dalley, Myths From Mesopotamia (Oxford, 1991), p. 41.

³ S. H. Langdon, op. cit., pp. 108-109.

¹ T. Jacobsen, The Treasures of Darkness (Yale, 1978), pp. 138-139.



Heru-ka-pet—Horus Bull of Heaven—the Egyptian representation of the planet Saturn. (Illustration by Richard M. Smith.)

she alludes to her "father Amanki" as the "wise lord." 1

Enki, however, was the Babylonian name of the Sumerian Ea,² whose identity as Saturn need also not be repeated. It therefore comes as no surprise that Inanna was straightforwardly identified as Ea's daughter.³

ISHTAR'S PARENTAGE

Inanna was not the only goddess said to have been fathered by Sin. In a prayer of Ashurnasirpal I, "Ishtar the queen" is also described as "the daughter of Sin." So, also, in what has become known as the Babylonian Psalms, where the "virgin goddess...the maiden Ishtar...glory of heaven" is made to refer to her father Sin.² And so, too, is Ishtar lauded as

¹ S. H. Langdon, op. cit., pp. 327-329; see also P. Vitebsky, op. cit., pp. 36-37

² J. Morgenstern, "The Divine Triad in Biblical Mythology," *Journal of Biblical Literature*, LXIV (1945), pp. 15, 16; G. Michanowsky, *The Once and Future Star* (N. Y., 1977), p. 31

³ S. H. Langdon, op. cit., p. 344.

¹ Idem, Tammuz and Ishtar (Oxford, 1914), p. 65.

² Idem, Sumerian and Babylonian Psalms (Paris, 1909), pp. 192-194.



The Lord Shiva—with the recumbent crescent in his hair. (Illustration by Richard M. Smith.)

the daughter of Sin in the Akkadian version of what was once the popular myth concerning the descent of the goddess.¹

In the meantime, it need not surprise us that the West-Semitic Anat, whom we have already encountered in her association with the planet Venus, was considered identical to the Babylonian Ishtar,² who, as we have seen, was just as unmistakably identified as the divine representative of the same planet. Actually, inter-relations between separate Venerian deities is not even required in this particular case since Ishtar was known to the very ancients as Dilbat,¹ which, as we have already seen, was the Sumerian name of the planet Venus.²

¹ J. Gray, op. cit., p. 34.

² *Ibid.*, pp. 96-96.

¹ M. Jastrow, Jr., "The Bearded Venus," revue Archaeologique, Vol. XVII (1911), pp. 271-274.

² H. Lewy, "Ištar-Sâd and the Bow Star," Studies in Honor of Benno Landsberger (Chicago, 1965), pp. 275-276.



TANIT

The goddess Tanit, whom we have already met in passing, is known to have been worshipped at various localities in the ancient Near East including Biblical Hazor, the Phoeniciam city of Sarepta, and Akko. Now recognized as having originally been a Near Eastern deity, her cult was introduced by the Phoenicians to North Africa where she was worshipped at Mauretania—under the additional name of Panthea—and at Dougga in Tunis. As is well known, however, she is remembered chiefly as having been the leading goddess of

¹ L. E. Stager & S. R. Wolff, "Child Sacrifice at Carthage—Religious Rite or Population Control?" *Biblicalk Archaeology Review* (January/February 1984), p. 38.

² *Ibid.*, p. 50.

³ Ibid.

¹ Ibid.

² A. B. Cook, Zeus: A Study in Ancient Religion, Vol. I (N. Y., 1964), p. 534.

³ L. Delaporte, op. cit., p. 84.

Carthage, where the oldest-known shrine, a small square space hardly a yard wide, hewn out of the rock, was dedicated to her. To judge by the inscriptions discovered in the area, the much vaster open-air precinct which today is named after her was shared with Ba'al Hammon. Most of the *stelae* bearing the goddess' stylized image were discovered there.

An ivory plaque found in a small shrine at Sarepta bears a dedicatory formula commemorating the erection, or installation, of a statue of Tanit-Ashtart.² This is clear and direct evidence that the Phoenicians themselves identified Tanit with Ashtart/Astarte/Ashteroth who, as we have already seen, has long been recognized as the goddess of the planet Venus. This identification was not lost to the later Romans who recognized the Carthaginian goddess as their own Venus Caelestis,³ the counterpart of the Greek Aphrodite Urania,⁴ the Venerian identity of whom need not be re-stressed.

To complete the circle, Aphrodite Urania was herself identical to the Syrian Attart, the same as Ashtart/Astarte/Ashteroth/Asherah/Atargatis, who was not only the same as Tanit, but also the same as Anat.⁵ Besides which, as already noted in a previous chapter of this very work, Tanit was held identical with Ishtar.

Additional to all of the above, the goddess in question was also understood as having been the same as the Egyptian Isis. Thus, among various other deities in an extant list from Egypt's New Empire, Isis is referred to as the "great goddess in the Tuat with Osiris in her name 'Tanit'."⁶

Actually, as with other matters, the identity of these various goddesses with one another is quite understandable. As Stephen Langdon stated back in 1931:

"By giving special names to the diverse functions of each deity the theologians [of antiquity] obtained an enormous pantheon...Each of the great deities received as many as fifty to a hundred different names..."

This synonymy was even more pronounced when it came to mythology's prime goddess. Rundle Clark expressed it quite laconically when he stated that: "All the major goddesses are really forms of the one Great Goddess."

Moreover as Cochrane noted: "It is a curious fact, one little noticed by the scholarly community as a whole, that the vast majority of the world's great goddesses were identified with the planet Venus."²

¹ M. A. Eddy, The Sea Traders (N. Y., 1974), p. 110.

² J. Pritchard, Recovering Sarepta, a Phoenician City (Princeton, 1978), pp. 104-107.

³ A. B. Cook, op. cit., Vol. II, p. 69.

⁴ *Ibid.*, p. 68.

⁵ I. Fuhr, op. cit., p. 38; E. Stern, "What Happened to the Cult Figures?" Biblical Archaeology Review (July/August 1989), p. 53; L. E. Stager, "When Canaanites and Philistines Ruled Ashkelon," in ibid. (March/April 1991), p. 41; L. M. Greenberg, "Astral Kingship," AEON (May 1993), p. 21; D. Soren, "Carthage Must Be Destroyed," Archaeology Odyssey (November/December 2000), p. 23.

⁶ E. A. W. Budge, Osiris and the Egyptian Resurrection, Vol. II (N. Y., 1911/1973), p. 277.

⁷ S. H. Langdon, op. cit., p. 91.

¹ R. T. R. Clark, Myth and Symbol in Ancient Egypt (London, 1978), p. 266.

² E. Cochrane, "Venus in Ancient Myth and Language." AEON, Vol. I, No. 1 (January 1988), p. 37; see also, W. Heimpel, "Catalog of Near Eastern Venus Deities," Syro-Mesopotamian Studies (1982), in toto.

As far as Tanit is concerned, there was a time when I was under the false assumption that her divine parentage seems "to be entirely unknown." What I did mention then was that she was known to have been the consort of Ba'al Hammon, not having realized at the time that she had also been considered his daughter.³

Who, however, was Ba'al Hammon?

¹ D. Cardona, "Child of Saturn," Part V, KRONOS (Summer 1985), p. 64.

² M. A. Edey, op. cit., p. 122; L. E. Stager & S. R. Wolff, op. cit., pp. 32, 45.

³ M. Eliade, Patterns in Comparative Religion (London, 1996), p. 422.

Chapter 26

The Ba'alim

BA'AL

Immanuel Velikovsky stressed a verse in the Old Testament that mentions Ba'al—quite often rendered simply as Baal—the Sun, the Moon, and the planets, in that order. He then drew attention to the fact that the Greek philosopher Democritus used a "division" that was identical, except for the replacement of Ba'al with Venus—i.e., Venus, the Sun, the Moon, and the planets. On that meager evidence—and on no other—Velikovsky identified the Canaanite god known as Ba'al as a personification of the planet Venus.

Velikovsky also offered the opinion that, in an earlier period, Ba'al had been a name for Jupiter while, earlier still, even a name for Saturn. Despite the fact that no evidence at all was ever offered for these contentions, some of Velikovsky's followers picked them up and, without any evidence of their own, repeated them as if well known. In passing, it should also be stated that Michael Reade's identification of Ba'al as the goddess Ishtar, and thus the planet Venus, is also lacking evidence. Other researchers, with their own axe to grind, have presented Ba'al as having represented Mars.

In the meantime, as far as our own work is concerned, Ba'al has already been equated with the Greek Kronos, who was Saturn, in both past pages of this work, as well as its prequels.²

The question the above raises has nothing to do with who is right and who is wrong, but, if our reconstruction of Earth's past cosmic history is to progress, erroneous planetary identifications have to be laid to rest.

¹ II Kings 23: 5.

² I. Velikovsky, Worlds in Collision (N.Y., 1950), p. 178.

³ *Ibid.*, pp. 178, 197.

⁴ *Ibid.*, p. 175.

⁵ M. Sieff, "Planets in the Bible: I—The Cosmology of Job," Society for Interdisciplinary Review, Vol. I, No. 4 (Spring 1977), p. 20; H. Eggleton, "The Neglected Maiden," in Society for Interdisciplinary Workshop, Vol. 3, No. 4 (April 1981), p. 31; A. de Grazia, Chaos and Creation (Bombay, 1981), pp. 188, 198, 223; idem., God's Fire: Moses and the Management of Exodus (Princeton, 1983), pp.54, 56, 105, 154.

⁶ M. G. Reade, "Ishtar, Isis, Baal and the Aten," Chronology & Catastrophism Workshop (2003, #2), p. 5.

⁷ D. W. Patten et al., The Long Day of Joshua and Six Other Catastrophes (Seattle, 1973), passim.; D. W. Patten, Catastrophism and the Old Testament: The Mars-Earth Conflicts (Seattle, 1988), pp. 68, 132, 143-144, 149, 155, 187-188, 237. idem, "The Origin and Decay of the Earth's Geomagnetic Field," Catastrophism and Ancient History (July 1987), p. 101

¹ See back to pp. 221, 335, 382, 393.

² D. Cardona, *God Star* (Victoria, British Columbia, 2006), p. 225; *idem*, *Flare Star* (Victoria, British Columbia, 2007), pp. 347, 348, where, in both cases, various sources are cited.

Followers of Velikovsky are not the only ones who have been trapped in the maze of the Ba'alim, that is the various Ba'als. Forgetting what the ancients themselves said about their gods and those of their neighbours—forgetting or ignoring the actual identities embedded in the very names and appellations of these deities—conventional mythologists seem to have vied with one another in confounding what had been clear all along.

Ba'al eventually found his way into Egypt where he was worshipped at Tanis and Memphis. Ramses II had such respect for the imported deity that he considered himself a warrior like Ba'al.

To most mythologists, Ba'al was a solar or a storm and weather god.³ William Albright considered him a god of vegetation.⁴ That, of course, had been the grand theory of James Frazer who explained just about all of mythology in such ecological terms.⁵ Originally propounded in a two-volume work, Frazer's opus on this subject finally swelled into twelve massive tomes. Never has so much effort and erudition been wasted on such a wild goose chase. Unfortunately, despite some early criticism, Frazer's authority carried so much weight that, even today, it is difficult to shake loose the manacles with which he has shackled the correct interpretation of myth. As indicated above, even the great Albright chose to adhere to Frazer's ill-founded interpretation despite Cyrus Gordon, and others, who had urged mythologists at large that such adherence was a big mistake.

BELUS-ALSO KNOWN AS BEL

To the Babylonians, Ba'al was known as Bel. Of this god, George Rawlinson wrote:

"...he represents also, as the second god of the first triad, the classical Jupiter. He is 'the supreme', 'the father of the gods,' 'the procreator', 'the Lord', par excellence, 'the king of all spirits', 'the lord of the world', and again, 'the lord of all creatures'."

Rather than describing "the classical Jupiter," however, these epithets, especially that of "procreator," more correctly describe the primeval Saturn.

Berossus, who was a priest of Bel in Babylon sometime during the 3rd century B. C., translated a number of Babylonian texts on both astrology and astronomy into Greek. He also compiled a history of his country in three volumes. Unfortunately, all of his works have perished, but extracts from his history have been preserved by Alexander Polyhistor, Flavius Josephus, and Eusebius Pamphili.

¹ J. B. Pritchard, Ancient Near Eastern Texts (Princeton, 1950), p. 250; D. A. Mackenzie, Egyptian Myth and Legend (N. Y., 1907/1978), p. 309.

² Ibid.; E. A. W. Budge, The Gods of the Egyptians, Vol. II (N. Y., 1904/1969), p. 281.

³ L. Delaporte, "Phoenician Mythology," New Larousse Encyclopedia of Mythology (London, 1972), pp. 75, 81;

⁴ W. F. Albright, Yahweh and the Gods of Canaan (N. Y., 1968), pp. 125-126.

⁵ J. G. Frazer, *The Golden Bough*, in all its various editions from 1890 onward, in toto.

⁶ G. Rawlinson, The Seven Great Monarchies of the Ancient Eastern World, Vol. I (N.Y., 1885), p. 76.

As was the common practice with the compilation of ancient histories, that of Berossus commences with the creation and organization of the cosmos. In this history it is Bel, here rendered Belus, who is presented as the Creator. As the Creator, Belus/Bel was the equivalent of the Hebrew El—and/or Elohim—whom we have well identified as the proto-Saturnian deity. In fact, was not Elus also called Kronos?

As some may, however, ask: What, then, of Elus/El who was considered to have been the father of Belus/Bel/Ba'al?³ Was not Kronos himself said to have been the father of Belus?⁴

Not only is there no contradiction here, these very proclamations serve as confirmation. The mythic themes that present the Saturnian deity as his own son and/or father continue to add further evidence of proto-Saturn's altered countenance that could be seen once the blinding light of his explosive flare-up had died down. As Ev Cochrane ably demonstrated, the traditional "first man" told about by various nations was merely a prototype of the Saturnian deity. Thus Alexander Polyhistor could write that "the Babylonians say that the first man was Belus, who is Kronos; and that of him was born a son [named] Belus."

Here, then, from the ancients' own mouth, we have a triple revelation: 1) that Belus was Kronos who was Saturn; 2) that the "first man" was Saturn, here rendered Belus; and 3) that Saturn (Belus) was the son of Saturn (Belus).

Among other lessons, the above should caution cosmic catastrophists not to accept divine genealogy as *necessarily* implying the generation of cosmic bodies from other cosmic bodies.

Even so, let me emphasize that neither Ba'al, nor Belus or Bel, was a name of Saturn. "Ba'al," like "Bel," actually meant "Lord" and/or "Master." (Alfred de Grazia's contention that "Baal" meant "god" is incorrect.) "Belus," meanwhile, is the Latinized form of "Belos," which, in turn, is the Hellenized form of "Bel." As such, these designations must be understood as titles or epithets. And, to be sure, the denizens of the ancient Near East recognized more than one such Lord, each of which was differentiated by an additional cognomen. We thus read of Ba'al Hadad, Ba'al Hammon, Ba'al Tsaphon, Ba'al Shamem, Ba'al Zebub, and various others. Collectively, they were known as the Ba'alim, which is simply the plural of Ba'al.

The question that must now be asked is: Did all these Ba'alim represent the same Saturnian deity?

THE LORDS DIVINE

Consensus of opinion has generally favored different identities when it comes to these differently-named Ba'alim. William Smith and Stanley Cook, for instance, have stated that

¹ "Fragments of Berossus from Alexander Polyhistor," in R. K. G. Temple, *The Sirius Mystery* (N. Y., 1976), pp. 250-251.

² Eusebius Pamphili, Evangelicae Praeparationis, I: x: 38b.

³ Ibid., I: x: 36c.

⁴ *Ibid.*, I: x: 38a.

⁵ E. Cochrane, "Kronos, Minos, and the Celestial Labyrinth," KRONOS (Spring 1979), pp. 91-93.

⁶ Eusebius Pamphili, op. cit., IX: xviii: 419d.

⁷ A. Caquot, "Western Semitic Lands: The Idea of the Supreme God," Larousse World Mythology (London, 1972), p. 89; W. F. Albright, op. cit., p. 124.

⁸ A. de Grazia, God's Fire: Moses and the Management of Exodus (Princeton, 1983), p. 54.

"the Baals [or Ba'alim] are not to be regarded necessarily as local variations of one and the same god, like the many Virgins or Madonnas of Catholic lands, but as distinct numina."

In contradistinction to Smith and Cook let me call on Willian Heidel, not so much as an appeal to authority, since I still disagree on some relative issues he saw fit to discuss, but because he arrived at his conclusion without having had a Saturnian axe to grind. Heidel knew nothing of the Saturnian scenario that my colleagues and I have slowly been unfolding through the years. His insight concerning the Ba'alim was reached through a detailed comparison of the Hebrew Yahweh with the varied gods of Canaan. As he well noted: "That the Hebrews, at least at times, identified Yahweh with Baal admits of no doubt." Thus, incidentally, we find that both Ba'al and Yahweh were referred to as the Exalted One, end of the end of

Nevertheless, much like Smith and Cook, Heidel, too, believed in the individuality of the various Ba'alim, but, unlike them, he realized that, in the end, they all reduce to one: Kronos/Saturn. As he wrote: "The Baalim were many, not one; and the Cronus [i.e., Kronos] known to us from Greek sources is, like the Saturn of Latin writers, an extremely composite figure." To which he added:

"...the mere fact of the apparently irresistible tendency to identify the Baalim with one another and with Cronus argues strongly for an essential similarity of nature. The Baalim were...the Lords of particular territories, peoples, and local shrines...Though their myths are known to us in but a few instances, we may be sure that they were generally worshipped as the creators and lawgivers of their respective peoples...If this were all, however, we should be sorely at a loss to understand how so many of these local gods came to be merged in the single complex of Cronus-Saturn...So far as the Semites are concerned, we cannot be greatly surprised to discover a tendency to reduce their gods to a few types, chief among them being that of Cronus; but Cronus-Saturn possessed so great powers of assimilation that it could be said of him that he ruled the whole Western world..."

The Saturnian deity's composite figure, however, did not derive from a multiplicity of deities who were merged into one, but from the ancient belief that, at one time or another, the Saturnian luminary had been composed of various parts—orb, ring(s), axis, eventually even a crescent—and from the likeness it exhibited to various known objects here on Earth. Add to that the various interpretations the ancients themselves forwarded concerning the ambiguity of what they considered its sex—male, female, androgynous—as also from its evolving nature—benign, malign—and the series of evolutionary changes it underwent—father, son, and consort.

¹ W. R. Smith & S. A. Cook, "Baal," Encyclopaedia Britannica, Vol. 2 (1959 ed.), p. 836.

² W. A. Heidel, *The Day of Yahweh* (N. Y., 1929), p. 445.

³ W. F. Albright, op. cit., p. 21.

⁴ Hosea, II: 16.

⁵ W. A. Heidel, op. cit., p. 465.

⁶ *Ibid.*, p. 466 (emphases added).

When the totality of these mythic themes and various others are taken into account as a tout ensemble, it becomes obvious that the identification of the Ba'alim with one another was not due to an "irresistible tendency." As Heidel himself stressed, even the gods of the Celts, far removed from the Near Eastern worshippers of the Ba'alim, were identified with Saturn. How far reaching, then, would this "irresistible tendency" have been? How could different nations, separated by time and geography, have fallen to the same predisposition?

These gods did not *merge* into what Heidel described as "the single complex of Cronus-Saturn." They had always been representative of him. The ancient Hebrews understood this quite well which is why, although the Old Testament is often made to allude to Ba'al and the Ba'alim, only seldom is any one particular Ba'al singled out by designation from among the fold. Thus, other than the names of towns, shrines, and/or persons that bore Ba'al's theophoric name, in the Old Testament Ba'al is mentioned sixty-three times, while the Ba'alim are spoken of eighteen times. In contrast, Ba'al Peor is mentioned six times, Ba'al Zebub four times, and Ba'al Berith only twice. To the Hebrews, Ba'al was always the Ba'al—that is the Lord—even though it is not usually so translated in English versions—since they knew that, despite his varying epithets, there was only one.

BA'AL TSAPHON

It is not my intention to discuss each and every Ba'al with which the ancient Near East and other Phoenician settlements were blessed and/or cursed since, for one thing, there are too many of them. It is, however, neither my intention to leave the Ba'alim's Saturnian identification rest on the generalities represented by the above. I will therefore discuss just two, perhaps the most prominent Ba'alim, in order to highlight this particular case.

It is thrice reported in the Old Testament that, when the Israelites fled from Egypt, they camped at a place called Pi-ha-hiroth that was situated "over against" Baal-zephon.² In no other context is the name of this locality again mentioned in the Scriptures.

Despite the fact that Ba'al Zephon was the patron god of Ugarit—the present Ras Shamra on the Syrian coast far from the borders of Egypt—there is nothing to suggest that the Egyptians could not have named a place and/or raised a shrine in his honor. Extra-Biblical sources, which describe a shrine to Ba'al Zephon in Egypt confirm it.³

Zephon is the same as Tsaphon (sometimes rendered Zaphon, Saphon, Sephon, and/or Safon). All variants are conventional transliterations of the Hebrew name for Mount Khazzi, the same as Mount Casius, that was sacred to Ba'al Tsaphon, not far from Ugarit on the same Syrian coast.¹

Now it has often been stated that the Romans alluded to Ba'al Tsaphon by the name Jupiter Casius.² But before this is accepted as a direct identification it should be noted that

¹ Ibid.

² Exodus 14: 2, 9; Numbers 33: 7.

³ L. Ginzberg, *The Legends of the Jews*, Vol. II (Philadelphia, 1969), p. 358; *ibid.*, Vol. III (Philadelphis, 1968), pp. 10, 13.

¹ W. A. Heidel, op. cit., p. 448.

² M. Vieyra, "Empires of the Ancient Near East: The Hymns of Creation," *Larousse World Mythology* (London, 1972), p. 74.

Jupiter Casius was the Latin translation of the Greek Zeus Casius who succeeded—that is, transplanted—Ba'al Tsaphon.¹

In Hebrew, tsaphon derives from a root that means "hidden" and also "dark," but not the "dark cloud" that André Caquot suggested. As the Dark Lord, Ba'al Tsaphon compares favorably with Black Saturn, the Black God we have discussed in earlier pages of this very work. But even as the Hidden Lord, the same god continues to be identifiable as the Saturnian deity. Consider the Roman historian Dio Cassius—and what a coincidence in the name!—who spoke of the Greek Saturn as the "hidden Kronos."

Tsaphon, however, also means "north." Ba'al Tsaphon can therefore be said to have been the Lord of the North, and, in fact, that is the generally accepted meaning of the god's name. And, as our readers should by now know, it was Saturn who was particularly remembered as the god of the north, the reason for which should by now be more than obvious.

If the countermarch of the Israelites to Baal-zephon during their exodus from Egypt proves anything, it is that the Israelites had already been worshipping this god long before their conquest of Canaan. Their halt at the shrine of this god could only mean that they wished to pay him homage before departing the land. So, for instance, did Heidel understand it. That the Israelites were partial to this god is ascertained through Jewish legends which state that, when the Egyptian deities were destroyed by Yahweh just before the slaves left Egypt, Baal-zephon alone was spared. Once in Israel, they continued to honor Baal-zephon as is evidenced by the fact that a city of Ephraim was actually called by his very name. Needless to say, the Israelites knew exactly who Baal-zephon was. This is indicated by the Israelite name Elizaphan, the meaning of which is El is Zephon. Since El, as we have seen, was one of the god Saturn's Semitic names, Ba'al Tsaphon's identity is all the more firmly established.

BA'AL HAMMON

William Albright was of the opinion that the name Ba'al Hammon meant "Lord of the Incense Burner" or "Lord of the Brazier." The Divine Incense Burner that Albright had in mind was actually an obscure deity known as 'Utht,' but, despite his detailed treatment of the subject, the transition from 'Utht to Hammon remains a forced one. This is especially so since, as we shall see, there is a more logical, and direct, identification at our disposal.

¹ W. F. Albright, op. cit., p. 128.

² J. Strong, *Hebrew and Chaldee Dictionary* (Nashville, 1890), p. 100.

³ A. Caquot, loc. c it.

⁴ Dio Cassius, Romaika, LXXVIII: 30: 1.

⁵ J. Strong, *loc. cit.*

⁶ L. Delaporte, op. cit., pp. 75, 80.

⁷ W. A. Heidel, loc. cit.

⁸ L. Ginzberg, op. cit., Vol. II (Philadelphia, 1969), p. 359; ibid., Vol. III (Philadelphia, 1968), pp. 10, 11, 13; W. A. Heidel, loc. cit., where other references are supplied.

⁹ Flavius Josephus, Jewish Antiquities, VII: 174

¹⁰ Numbers 3: 30-31; I Chronicles 15: 8; II Chronicles 29: 13.

¹ W. F. Albright, op. cit., p. 144.

² Ibid.

The emblem of Ba'al Hammon, a crescent with a disc within it, has been discovered in such places as Zinjirli, Hazor, and Carthage, which emblem led Yigael Yadin to conclude that Ba'al Hammon was a Moon god. But that this emblem was identical to that of Sin, and therefore Saturn, we have just documented in our previous chapter. Since the emblem of any god cannot be considered incidental, this alone is enough to identify Ba'al Hammon as Saturn. But, so that this will not have to be accepted as the last word, there is more.

Yadin was also of the opinion that Haman—the same as Ham(m)on—could have been an ancient name of the Amanus Mountains in the region of which Ba'al Hammon is known to have been worshipped. He thus believed that Ba'al Hammon could mean Lord of the Amanus.² As Julius Lewy had earlier shown, however, mountains were named in honor of deities and not vice versa. In fact, Lewy had made it quite clear that the Amanus were named in honor of the god 'Aman, to which he added that 'Aman was a name of the planet Saturn.³ In Assyrian inscriptions, Amanus appears as Hamanu.⁴ It therefore becomes evident that 'Aman and Ham(m)on were one and the same, and that Ba'al Hammon means nothing more than Lord Saturn.

The ghastly remains of sacrificed children have been unearthed in huge quantities in the Precinct of Tanit at Carthage. In an area estimated to be somewhere around 64,000 square feet, as many as 20,000 urns crammed with the remains of such sacrificed victims were deposited between the years 400 and 200 B.C. These children, as well as lambs, were sacrificed to Ba'al Hammon.⁵ Yet, quite a few Classical Greek and Roman writers invariably claimed that these sacrifices were conducted in honor of Kronos/Saturn,⁶ thus unequivocally equating Ba'al Hammon with that planetary deity.

Tertullian, the earliest-known of the Church Fathers, was no mere visitor to Carthage. He lived most of his life there—circa 150-225 A.D. He, too, attributed these Carthaginian sacrifices to Saturn, understanding quite well that they were conducted in memory of the mythological slaying of Saturn's own children.⁷

Finally, according to a *stela* inscribed in Latin that was discovered at Ngaus in eastern Algeria, it becomes evident that these sacrifices to Ba'al Hammon were conducted at night—sacrum magnum nocturnum¹—thus retaining the additional memory that Saturn had been viewed as a god, or sun, of night.²

The reason we have gone so much into the Ba'alim's identification stems from the fact that many of them have been individually misidentified by various mythologists who

¹ Y. Yadin, Hazor: The Rediscovery of a Great Citadel of the Bible (N. Y., 1975), p. 55.

² Ibid.

³ J. Lewy, "The Old West Semitic Sun-God Hammu," *Hebrew Union College Annual*, XVIII (1943-1944), pp. 456-457, 470.

⁴ *Ibid.*, p. 455.

⁵ L. E. Stager & S. R. Wolff, "Child Sacrifice at Carthage—Religious Rite or Population Control?" *Biblical Archaeology Review* (January/February 1984), p. 32.

⁶ P. G. Mosca, Child Sacrifice in Canaanite and Israelite Religion (Cambridge, 1975), pp. 2-22 in which various original texts are cited.

⁷ Tertullian, Apologeticus, IX: 2-4.

¹ W. F. Albright, op. cit., p. 235.

² See here especially, D. Cardona, *God Star* (Victoria, British Columbia, 2006), pp. 141 ff.

obviously believed they knew better who these deities represented than those very ancient people who paid them homage. In the meantime, we can also add that, as the offspring of Ba'al Hammon, the goddess Tanit, identifiable as the deity of the planet Venus, can be said to have been a veritable child of Saturn.

But what, exactly, could that have meant?

Chapter 27

Lux Divina

THE FEMALE PLANET

ur quest for the progenitor of Venus has led us to the conclusion that not only was the goddess considered to have been the Saturnian god's daughter, but also his sister, wife, and, in some cases, even mother. This was a situation that continued to be preached down into Christian times as can be seen through the Gnostic Apocryphon of John in which the Monad's first creative thought was a feminine figure called Barbelo.¹

What, however, could these relationships mean when translated into astronomical terms? Or why, for that matter, should planets have been considered male or female? That is a question that has also piqued the interest of both David Talbott and Ev Cochrane. As they asked about Venus:

"Why was a feminine nature ascribed to the planet? It is almost an ironclad rule of ancient symbolism that Mars, Saturn, Jupiter, and Mercury appear as masculine figures. Why was Venus the exception? Today we see the visible planets as fine star-like points of light. Does one of them appear especially *feminine*?"²

Returning to the subject at a later time, Cochrane presented various snippets illustrating the belief in the femininity of the planet Venus among various populations both ancient and modern.³ When he was however asked if the planet Venus had *always* been represented as female, he had the following to say:

"It is the common patterns, rather than the occasional exceptions, that are ... of ultimate importance in mythological exegesis... Speaking generally, I think it is fair to say that the vast majority of ancient Venus-deities are female [but, obviously, not all]."

In fact, male Venus-deities are not entirely unknown as, for instance, among the Chimú people of Peru,² as also among both the Maya and the Aztecs nations.³ It was an entirely

¹ B. A. Pearson, "Gnosticism 101: The Apocryphon of Hohn, Biblical Archaeology Review (May/June 2008), p. 55.

² D. Talbott & E. Cochrane, "The Origin of Velikovsky's Comet," KRONOS X:1 (Fall 1984), p. 29 (emphasis as given); see also E. Cochrane, "The Female Star," AEON Vol. V, No. 3 (December 1988), pp. 49 ff.

³ E. Cochrane, The Many Faces of Venus: The Planet Venus in Ancient Myth and Religion (Ames, Iowa, 2001), pp. 7 ff., where various sources are cited.

¹ Idem, in an interview conducted by the Editor of AEON that was published under the title "Actors in a Cosmic Drama," AEON Vol. II, No. 1 (September 2006), p. 50 (emphasis added).

² C. A. Burland, Myths of Life & Death (N. Y., 1974), p. 100.

³ A. Aveni, Conversing With the Planets (Boulder, Colorado, 2002), pp. 70-71, 94.

different matter, however, when Cochrane was asked why the planet in question was considered as having been feminine, to which he answered: "I'm not sure it's possible to provide a definitive answer to that question, as Venus's sexual identification is certainly prehistoric in origin and thus, to some extent, lost or hitherto obscure."

It is not that others have not tried to solve this problem. The British astronomer Patrick Moore was of the opinion that the planet Venus was thought of being feminine because, to the unaided eye, it appears to be "the loveliest of the planets," concerning which, Cochrane remarked:

"Here's a male chauvinist answer if ever there was one. Why should a beautiful planet be viewed as female rather than male?"

David Grinspoon, the American astrobiologist, on the other hand, believed that the planet's femininity stemmed from "the approximate 260-day length of a Venus appearance in the morning or evening" which "coincides closely with the average length of the human gestation period." But, as Cochrane again noted, it is highly improbable that "primitive cultures around the world" would have noticed this approximate synchronism.

One might also ask: Why would Saturn have been believed to have fathered a daughter? Actually, as we have already indicated, Saturn was also believed to have fathered a son. But this turned out to have been his former self in an entirely different, and much more effulgent, appearance. So where, then, did his daughter come from?

As we have seen, the birth of planets from other planets has been seriously discussed by conventional astronomers. Is it then possible that the planet Venus was ejected from the proto-Saturnian brown dwarf star?

DIVINE RADIANCE

There was a time when I registered my doubts that the first appearance of the planet Venus could have been observed by anyone.⁶ Further research into the subject proved me wrong. In fact, a passage in what is now known as the Broken Obelisk of Tiglath Pileser I might actually contain a record of the first appearance of Venus. The passage in question states that it was "in the days of cold, of frost, of ice" that the star named Kaksisa made her appearance.¹ For reasons which we need not here go into, the star named Kaksisa has been understood to refer to Sirius. But, as we have already seen, Sirius was viewed by the ancients as a surrogate for Venus. This is additionally ascertained through the name Ishtar-Sâd that the Assyrians supposedly bestowed on Sirius, since, as we have also seen, Ishtar was one of the

¹ E. Cochrane, op. cit., p. 51.

² P. Moore, *The Planet Venus* (London, 1959), p. 19.

³ E. Cochrane, *The Many faces of Venus*, see above, p. 12.

⁴ D. Grinspoon, Venus Revealed (N.Y., 1997), p. 18.

⁵ E. Cochrane, op. cit., p. 13.

⁶ D. Cardona, "Saturn's Flare-ups," Society for Interdisciplinary Studies Workshop, Vol. V, No. 1 (1982), p. 9.

¹ H. Lewy, "Ištar-Sâd and the Bow Star," Studies in Honor of Benno Landsberger (Chicago, 1965), p. 274.

names bestowed on Venus. Besides which, as Hildegard Lewy claimed, Ishtar-Såd specified Sirius

"only in special circumstances."1

Needless to say, none of the above explains why Venus, or Sirius for that matter, was believed to have appeared in the days of cold, of frost, and of ice. But, although I cannot be entirely sure, if we interpret these freezing days as those of Earth's last Ice Age, we can understand that Venus might have first appeared during that particular era.

Even so, one may rightly wonder how any of the primitive tribes that existed during the Ice Age would have noticed the first appearance of a twinkling dot up in the sky. Besides which, have we not stressed the invisibility of the stars, due to their shielding by proto-Saturn's plasmaspheric bubble, during that time? If, however, Venus was ejected by proto-Saturn, it would naturally have appeared inside that bubble and, being that much closer to Earth, it would have appeared much larger and, obviously, much brighter, than a twinkling dot in the sky. Can that much, at least, be verified?

The identity of the goddesses to be mentioned below as divine representatives of the planet Venus need not be repeated. Starting with the earliest civilization that we know of, that of the Sumerians, we come across a hymn that lauds Inanna as standing "in the heart of the sky" like her "father Sin" as "brilliant" as "the moonlight." And, in the hymn addressed to Inanna by the Sumerian monarch, Iddin-Dagan, we come across the following greeting:

"To her who appears in the sky...to the great Queen of Heaven, Inanna...to her who fills the sky with her pure blaze, to the luminous one, to Inanna, as bright as the Sun, to the great Queen of Heaven, Inanna...decked in splendor, to the princess, who fills heaven and earth with her great radiance, to the oldest daughter of Suen [= Sin = Saturn], to Inanna...In her magnificence...when with her pure blaze she fills the sky...I want, in a song, to address her, the mistress."

And so, also, in the famed hymn by Enheduanna that is now known as the *Exaltation of Inanna*, in which the goddess is again lauded as "resplendent light" and "clothed in radiance" like "the light of the rising moon."

So, likewise, with the Asyro-Babylonian Ishtar, lauded as the "the mighty Queen of Heaven," and described as "the light of Heaven...who shines like the sun."

That these hymns compare Inanna's, as also Ishtar's, radiance to the light of the Moon and the Sun, neither of which would have been present during the time being discussed, is understandable since they were written down at a time when these luminaries had

¹ *Ibid.*, p. 275

² F. Bruschweiller, *Inanna* (Leuwen, 1988), p. 107 (translation by Birgit Liesching).

³ Ibid., p. 105; see also D. Reisman, "Iddin-Dagan's Sacred Marriage Hymn," Journal of Cuneiform Studies, 25 (1973), pp. 186 ff.

¹ As translated by W. W. Hallo & A. J. A. van Dijk, *The Exaltation of Inanna* (New Haven, 1968), lines 1, 2 & 147.

² S. H. Langdon, Semitic Mythology, Vol. V of C. J. A. MacCulloch (ed.), The Mythology of All Races (N. Y., 1931/1964), p. 25.

appropriated the night and daytime skies. It cannot, however, be said that, at the time these hymns were written, the planet Venus would have shone as bright as the Sun, the Moon, or that she could have filled the sky with her pure blaze, her great radiance, and her magnificence. Yes, there will be some who will claim that these were allegories not to be taken at face value. But then, why would that pinpoint of light that is now Venus have evoked such approbation just about all over the ancient world? Besides which—and what follows I must stress—what is there about the manner in which Venus is presently seen with the naked eye that would incite her worshippers to offer their prayers to "the holy torch who fills the heaven, to the light, Inanna, to her who shines like daylight"? As Inanna herself was made to state: "I am a great storm let loose from heaven, sending its splendour far and wide!"

And so, again, with Ishtar: "O brilliant one, torch of heaven and earth, light of all peoples...O firebrand...O gleaming one..." And, still again, I have to ask: what is there about the present-day Venus that would have made the ancients describe her as a "lion who shines in the sky"?

LIGHT BRINGER

Descriptions of the Venus goddess as a highly radiating body are not confined to the Near East. But, more than that, we often come across mytho-historical texts that present the goddess as having been *responsible* for the shedding of the light. Thus, in Heliopolitan Egypt, Hathor was known as "mother of the light." In fact, ancient Egyptian astronomy presents Venus as the very "bringer" of light.

In Greece we also come across Artemis, whom we have already met and seen coupled with various other Venusian goddesses despite the fact that she is often misidentified as the Moon. One thing we note about this goddess is that her birth "was celebrated by a blaze of golden light," which seems to tell us that the light in question did not exist before her birth.

The refulgent light at the birth of the goddess is perhaps nowhere as dramatically told as in the Hindu *Devi-Mahatmya* which relates the birth of the Devi in the following words:

"Then issued forth a great light from the face of Vishnu...and from that of Brahma and Shiva too. From the bodies of Indra and other devas also sprang forth a very great light. And (all) this light united together. The devas saw there a concentration of light...Then that unique light...combined into one and became a female form."²

¹ See here, also, L. E. Rose, "Just Plainly Wrong': A Crotique of Peter Huber," KRONOS, Vol. III, No. 2 (Winter 1977), pp. 110, 112.

² D. Reisman, loc. cit.

³ E. Cochrane, "Inanna: Warrior-Goddess Extraordinaire," in I. Tresman (Editor), Quantavolution: Challenges to Conventional Science (Sandbach, Cheshire, England, 2010), p. 198.

⁴ J. Pritchard, Ancient Near Eastern Texts Relating to the Old Testament (Princeton, New Jersey, 1969), p. 384.

⁵ E. Cochrane, The Many Faces of Venus (Ames, Iowa, 2001), p. 76.

⁶ E. A. W. Budge, The Gods of the Egyptians, Vol. I (N. Y., 1904/1969), p. 429.

⁷ R. Klibansky, et al., Saturn and Melancholy (London, 1964), p. 137.

¹ A. S. Murray, Manual of Mythology (N. Y., 1950), p. 112.

² S. Jagadisvarananda, *The Devi-Mahatmya or Sri Durga-Saptasati* (Madras, 1953), p. 25 ff.

Note that, with the exception of Indra, the deities who were said to have shed the light from which the Mahadevi was formed are all identifiable as personifications of Saturn. That these Saturnian deities are presented as separate entities is due to a syncretism of faiths that, in a country overburdened with sectarian tendencies, must all, at one time or another, have been guaranteed as having been the one who emitted the light.

Indra, as also the arming of the goddess with various weapons, are included in this myth because, in the main, the telling concerns the battle of the gods following the shedding of the light in which the goddess played a significant part—but, in order not to throw events out of sequence, that, too, must await a future sequel to this work.

In the meantime, the association of the radiant light of the goddess with that of Saturn is indicated in other mytho-historical records that have come down to us from remote antiquity. Thus, in a supplication to Ea, Sumerian priests were wont to chant: "May Damkina, queen of the deep, illumine thee with her countenance." For that matter, Tammuz, who can be said to have originated as an avatar of Ea, was also lauded as he "of the radiant face."

But now here comes a very important question: Was the light in question, the light associated with Creation, shed by the proto-Saturnian brown dwarf star as we have been propounding in both this work and its prequels, or was it shed by Venus as Talbott has maintained for many years?³

¹ D. A. Mackenzie, *Myths of Babylonia and Assyria* (London, 1915), republished as *Mythology of the Babylonian People* (London, 1996), pp. 33-34.

² *Ibid.*, p. 86.

³ D. Talbott in an interview that was published as "The Saturn Thesis," *AEON*, Vol. IV, No. 3 (December 1995), pp. 31 ff.; *op. cit.*, Part 2, *AEON*, Vol. IV, No. 5 (November 1996), pp. 29 ff.; *op. cit.*, Part 3, *AEON*, Vol. IV, No. 6 (May 1997), pp. 41, 54 ff., 63

Chapter 28

Child of Saturn

THE BIRTH OF VENUS

It was in a phone conversation sometime in October of 1983 that Ev Cochrane shared with me a revolutionary breakthrough that ended up constituting one of the most brilliant insights concerning the development of the proto-Saturnian configuration. What Cochrane brought to my attention was that the planet Venus was first seen plumb in the centre of the proto-Saturnian orb. David Talbott, who had proposed different scenarios, as so had I, could not help but welcome this revelation, as, needless to say, so did I.²

As Cochrane noted, the appearance of Venus within the proto-Saturnian orb accounts for the description of Venus as the "heart-soul" of the ancient sun-god that forms a "fundamental motive in the curious mythology surrounding this planet." That, for instance, was certainly believed of the Egyptian Ra who was said to have externalized his "heart-soul" in the form of a female divinity.⁴

We come across the same belief in Akkadian tradition where, as Cochrane indicated, "the word *istaru* signifies the external manifestation of the 'soul,' with the word *istaru* being "an obvious cognate of Ishtar/Venus."⁵

The same situation occurs across the ocean in Mexico where we find that the Aztec name for Venus, Ehecatl, actually means "soul," "breath," and "wind." This is in keeping with the birth of the planet Venus that is said to have emerged as Quetzalcoatl's soul.

Thus, as far as the ancients were concerned, God and goddess resided in one place. This is established through Iddin-Dagan's marriage rite that we have already had reason to discuss in which Inanna and the Saturnian deity known as An are proclaimed to have occupied the same heavenly throne. "In heaven she surely stands," it was said of her. "With An she takes her seat upon the great throne."

The goddess Tanit, the very daughter of Ba'al, was known as *Tennit-panê-ba'al*, in which panê is derived from pānîm, meaning "face." She thus became famously known as

¹ D. Talbott, "Mother Goddess and Warrior Hero," Part One, AEON, Vol. I, No. 5 (1988), pp. 38 ff.

² D. Cardona, "The River of Ocean," Chronology and Catastrophism Review, Vol. XI (1989), pp. 40 ff.

³ E. Cochrane, "The Birth of Athena," AEON Vol. II, No. 3 (1990), p. 20.

⁴ E. A. W. Budge, The Egyptian Book of the Dead (London, 1901 edition), p. 342.

⁵ E. Cochrane, lo, cit.; but see also A. Oppenheim, Ancient Mesopotamia (Chicago, 1964), pp. 199 ff.

⁶ D. Brinton, The Myths of the New World (N. Y., 1968), p. 273.

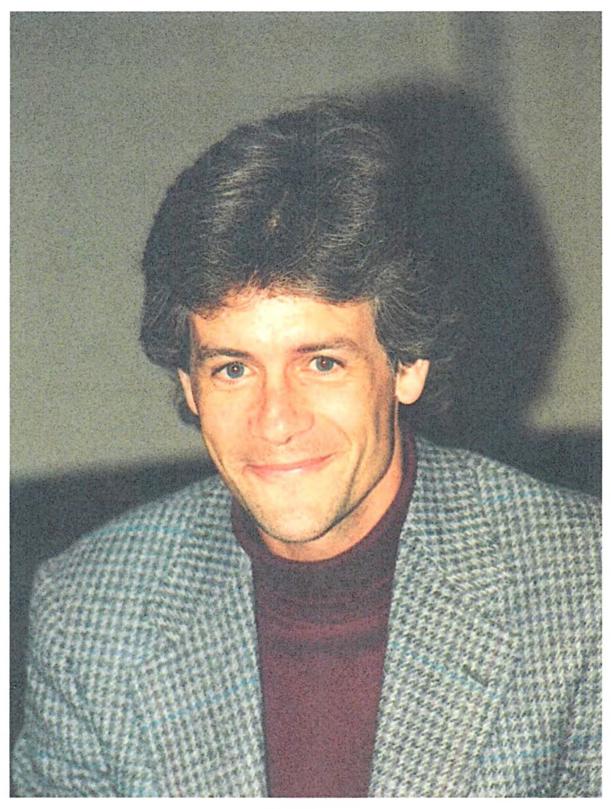
¹ E. C. Krupp, Beyond the Blue Horizon (N. Y., 1991), pp. 200-201...

² D. Reisman, "Iddin-Dagan's Sacred Marriage Hymn," Journal of Cuneiform Studies, 25 (1973), pp. 186 ff.

³ M. Eliade, Patterns in Comparative Religion (London, 1996), p. 422.

⁴ W. F. Albright, Yahweh and the Gods of Canaan (N. Y., 1968), p. 135.

⁵ Ibid.



Ev Cochrane. (Photograph – 1995 – by the author.)

Face of Ba'al. The same was said of Anat, who was additionally known as *Anat Panê Ba'al*. Each of the goddesses in question could best have appeared as the face of Ba'al if the planet they represented had been seen smack in the middle of the proto-Saturnian orb that Ba'al exemplified.

Lewis Greenberg tells us that "Tanit was closely related to Astarte...and certain scholars even consider them to be identical." As we have already seen, however, these two deities were assimilated into one, which is why, among the Phoenicians, the goddess was venerated as Tanit-Ashtart.⁴

According to an ancient Egyptian document, Astarte was known as the daughter of Ptah,⁵ which again casts the goddess as the child of the Saturnian deity.⁶ The goddess was also known as Ashtart-shem-Ba'al⁷—Aštart-šem-Ba'al—where shem-Ba'al is translatable as "name of Ba'al." By assuming the name of Ba'al, the goddess became the feminine prototype of her own father. In fact, in the Phoenician city of Gebal, the goddess was revered as Ba'alat, sometimes rendered Beltis,⁹ and thus made to share her Father's name.

THE HATCHLING

In answer to whether it was the planet Venus or the proto-Saturnian orb that shed the primordial light associated with Creation, let me first confess that I had originally accepted Talbott's contention that the light had, in fact, been shed by Venus. Continuing research, however, dictated that this resulted from the illusionary vision imposed upon mankind through the superimposition of the planet Venus upon the face of the proto-Saturnian orb as viewed from an Earth suspended directly beneath the two of them. And yet, even then, the illusion did not entirely deceive those who had witnessed the event, as note, for instance, the manner in which the Sumerian priestess Enheduanna described it in her famous hymn, *The Exaltation of Inanna*.

As it is there intimated, it was "the brilliant radiance of Suen," that is Sin, that wrapped the "stature" of the goddess. 10 What this claims is that it was not the planet Venus that shed

¹ L. E. Stager, "Eroticism & Infanticide at Ashkelon," *Biblical Archaeology* Review (July/August 1991), p. 42; E. Mazar, "Achziv Cemeteries: Buried Treasure from Israel's Phoenician Neighbor," in *ibid*. (September/October 2010), p. 45; O. G. S. Crawford, *The Eye Goddess* (Oak Park, Illinois, 1991), p. 55.

² *Ibid*.

³ L. M. Greenberg, "Astral Kingship," AEON, Vol. III, No. 2 (May 1993), p. 21.

⁴ J. Pritchard, *Recovering Sarepta*, a *Phoenician City* (Princeton, 1978), pp. 104-107; see also D. Soren, "Carthgage Must Be Destroyed," But Must It Be Forgotten," *Archaeology Odyssey* (November/December 2000), p. 23.

p. 23. ⁵ I. Fuhr, "On Comets, Comet-Like Luminous Apparitions and Meteors," concluded, *KRONOS*, Vol. VIII, No.1 (Fall 1982), p. 49.

⁶ For Ptah as Saturn see D. Cardona, *God Star* (Victoria, British Columbia, 2006), pp. 149, 194-196, 214, 225, 311, where various evidences and relevant sources are supplied.

⁷ W. F. Albright, op. cit., p. 134.

⁸ Ibid. See also, M. Eliade, loc. cit.

⁹ S. H. Langdon, Semitic Mythology, Vol. V of C. J. A. MacCulloch (ed.), The Mythology of All Races (N. Y., 1931/1964), p. 67.

¹⁰ F. Bruschweiller, *Inanna* (Leuwen, 1988), p. 137 (translation by Birgit Liesching).

the light in question, but that, in fact, the planet was enveloped in the glorious radiance that was emitted by the proto-Saturnian brown dwarf star. Thus, since Venus is here accepted as having first appeared plumb in the middle of the proto-Saturnian orb, the light in question would not have appeared as streaming across the face of the planet Venus. The light would instead have actually appeared as radiating from behind it across the proto-Saturnian orb as various depictions of the event seem to illustrate.

To go further, as we have already seen, and as Richard Heinberg well understood, quite a few "myths that characterize the primal reality as chaos and water" also "include the symbolism of an egg" as "the womb of Creation." And, as we have already discussed, The Laws of Manu state that, wishing to draw different creatures from his body, the primal deity "first by thought produced the waters and deposited his seed in them," which "seed" is then said to have become "a golden egg" that "in brilliancy" was "equal to the sun." In that cosmogonic egg, the primal deity was himself "born as Brahman." And, as we have already shown in a previous chapter of this very work, the primal deity's association with, and birth from, the cosmogonic egg goes much beyond The Laws of Manu.

Here, however, is where a certain amount of confusion set in, apparently even among those who had witnessed the unfolding of the cosmic events we have been striving to recreate. And, when one thinks about the changing aspects that the deity was seen to go through following the ebbing of the light he himself had radiated, who is to blame them? This comes about when we find that the goddess we have been discussing was also said to have hatched from this egg.

Although I now disagree with Talbott that the Venerian orb was the original image that gave rise to the myths concerning the cosmogonic egg, I concur with him concerning their close affiliation. In fact, when delving through ancient Egyptian texts, we come across the notion that egg and goddess were actually thought to have been one and the same. As Talbott has correctly ascertained, in theses texts, "the egg is a common determinative for goddess." Thus, the words userit, netrit, hen't, and shepsit, all of which mean "goddess," use the egg hieroglyph as a determinative.⁵

We also find an affinity between certain words that mean "egg," such as aper, suh-t, and sehu-t, and the names of certain corresponding, even if minor, goddesses in the Egyptian pantheon such as Aper-t-ra, Suhit, and Sehith.⁶

There is then the goddess Ahait, a form of Hathor, whose name is also written with the egg determinative, as is Uben-em-nubit, another name of the goddess Hathor. Other names of the same goddess are P-pestit-neteru, Qem-baiu-set, and Tchetit, all of which are likewise

¹ R. Heinberg, Memories and Visions of Paradise (Los Angeles, 1989), p. 27.

² Laws of Manu I:v:5-9.

³ See here D. Cardona, "The Evolution of the Cosmogonic Egg," AEON, Vol. III, No. 5 (May 1994), p. 58.

⁴ D. Talbott, "From Myth to a Physical Model," AEON, Vol. III, No. 3 (October 1993), p. 24.

⁵ E. A. W. Budge, An Egyptian Hieroglyphic Dictionary, Vol. I (N. Y., 1920/1978), pp. 182, 401, 486 & Vol. II, p. 737. ⁶ *Ibid.*, Vol. I, p. 119 & Vol. II, pp. 593, 683.

⁷ *Ibid.*, Vol. I, p. 7.

⁸ *Ibid.*, p 159.









Celtic petroglyphs from Dowth, Ireland, intimating that the light was seen to radiate from behind the Venerian orb across the face of the primeval sun.

written with the egg determinative, as, in fact, is the proper name of Hathor—i.e., He-t-Her—itself. The same is applicable to Isis whose name, in Egyptian correctly rendered Ast, is also written with the same egg determinative, as so is her cognomen Neter-mut (or Mut-neter).

Even so, it has to be admitted that the emphasis on the association of the egg with the goddess is not so deeply stressed in the mythologies of other ancient nations.

Fair enough, we do encounter a few non-Egyptian goddesses who were also associated with the cosmogonic egg, such as Atargatis, the prime goddess of northern Syria, who was actually claimed to have been hatched from one such egg.⁵

We also come across the Pelasgian goddess Eurynome who was said to have risen naked from chaos, which, again, associates her birth with the proto-Saturnian deity. But while she was not believed to have been hatched out of an egg, it was said that she later *did* lay the egg in question.⁶ Even Helen of Troy, who never existed as a real woman, but who actually originated as a goddess of radiating star-light,⁷ was believed to have hatched from "a hyacinth-colored egg" that some say had fallen from the Moon.⁸

There is then Eostre, the Anglo-Saxon goddess whose rites were observed in the month named Eosturmonath which corresponds to our April. Although nothing much is known about her, she must have been highly venerated since Christianity borrowed her name to honor its holiest holiday in an effort to subdue paganism. And yet, the Christian holiday in question, that we now know as Easter, revered a *male* deity—Christ risen from the dead—in lieu of a female one.¹

¹ *Ibid.*, p. 235 & Vol. II, pp. 770, 914.

² *Ibid.*, Vol. I, p. 455.

³ *lbid.*, p. 81 & Vol. II, p. 633.

⁴ *Ibid.*, Vol. I, p. 402.

⁵ D. A. Mackenzie, Myths of Babylonia and Assyria (London, 1915), republished as Mythology of the Babylonian People (London, 1996), pp. 28, 426..

⁶ R. Graves, The Greek Myths, Vol. I (Harmondsworth, 1964), p. 27.

⁷ E. A. S. Butterworth, The Tree at the Navel of the Earth (Berlin, 1970), pp. 102-103.

⁸ R. Graves, op. cit., p. 206; A. B. Cook, Zeus: A Study in Ancient Religion, Vol. II, Part II (N. Y., 1965), p. 1015.

¹ E. C. Krupp, op. cit., p. 99; J. Simpson, "The Viking and Germanic World," in H. Cleary (ed.), Sagas of the Norsemen (London, 1997), p. 16.

Eostre is not said to have hatched from an egg or to have herself laid an egg. Even so, just as is well known in the Christian world, eggs have become one of the main symbols associated with Easter. And yet, eggs, which are usually painted in various colorful designs in celebration of this holiday, have absolutely nothing to do with the risen Christ that the feast of Easter is meant to celebrate. The colorful eggs are merely a left-over from a pagan feast that honored the goddess whose name has been foisted on this Christian holiday and have absolutely nothing to do with it. If nothing else, this proves the potency that superstitious beliefs continue to have even in these modern times.

To be sure, egg-related practices and the superstitions associated with them continue into the present among various European communities especially in relation to agriculture. There is really no need to go into all of that, but, as Mircea Eliade ably noted, "whatever ritual pattern it is linked with, the egg never loses its primary meaning; it ensures the *repetition* of the act of creation which gave birth *in illo tempore* to living forms."

It might then be assumed by some that, since the Venerian goddess was also associated with the origin of agriculture and agronomical activities, the inclusion of eggs in these events would directly tie them with Venus. What must, however, be kept in mind is that the origin of agriculture and agronomical activities were just as strongly associated with the proto-Saturnian deity, if not even more so. It nonetheless remains quite obvious that, at least in some cases, Venus was thought of as having been the egg while, in others, as having hatched from it. As we shall soon see, both beliefs can be said to have been symbolically legitimate.

THE FOAM-BORN

Tales concerning the birthing and/or creation of entities from the foam of the sea were told, as some continue to be told, in various countries. Among such mythic creations one encounters the islands that form the archipelago of Japan that were said to have been formed by the spontaneous consolidation of such foam.³

According to the Polynesians, the darkness that engulfed heaven before the Creator set out to dispel it had actually existed upon the very "froth of the waters." Among the Yuki Amerinds, this froth, or foam, infested the waters of Creation right from the very start. It was from this foam, that was said to have "moved round and round continually," that Taikó-mol was believed to have issued. So, similarly, but with some variations, among the Penobscot and the Yuma Amerinds. Farther south on the same continent we encounter the Incan Creator, whose name, Viracocha, actually translates into the phrase "Foam of the Sea".

That this foam alludes to the circumstellar disk that surrounded the proto-Saturnian sun should by now be quite evident. And, as we have seen, once the blazing light that it had shed began to ebb, this primeval sun changed into a brighter version of itself. It can therefore be

¹ M. Eliade, op. cit., pp. 415-416.

² Ibid., p. 416 (emphasis as given).

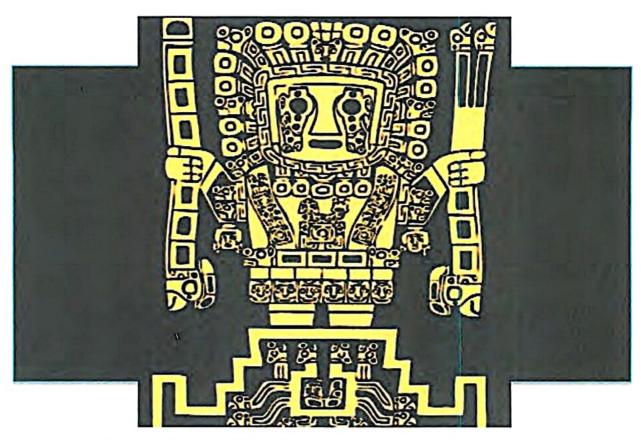
³ F. S. Dobbins, Error's Chains: How Forged and Broken (N. Y., 1884), p. 309.

⁴ M. A. van der Sluijs, *Traditional Cosmology*, Volume One (London, 2011), p. 74.

⁵ J. Bierhorst, The Red Swan: Myths and Tales of the American Indians (N.Y., 1976), p. 39.

⁶ R. Erdoes & A. Ortiz, American Indian Myths and Legends (N. Y., 1984), pp. 12, 77.

⁷ P. Tierney, The Highest Altar: The Story of Human Sacrifice (N. Y., 1989), p. 154.



The Incan Creator god Viracocha whose name translates as Foam of the Sea.

understood that the Creator was visualized as having been reborn and that his birth was somehow associated with the reorganization of his foamy sea.

And yet, as with the cosmogonic egg, the Mother Goddess was likewise associated with this foamy sea. Known as Earth Mother to the Pueblo Amerinds, it was said that she spat on the water and stirred it with her finger until it was crested with foam from which mists and rainbows were created. So, similarly, among the Zuni who hold that Awona-Wilona, their Creator, formed a "bubble" around himself, from where he impregnated "the great waters" upon which rose what has been described as "scums" from which was born the goddess known as Awitelin Tsita.²

In India we come across the *Devi-Upanishad* which relates, even if briefly, how the goddess known as Devi, whose Venusian identification has already been documented, came to be. As it is there told, when the other deities asked her where she had come from, she replied that her birthplace had been "in the water inside the sea."

While, to my knowledge, Athena was never described as having sprung from the sea, a *Homeric Hymn* describes the sea as having been tossed about with foam during her birth.²

¹ J. S. Morgan, When the Morning Stars Sang Together (Agincourt, Canada, 1974), p. 4.

² M. A. van der Sluijs, op. cit., p. 97.

¹ M. Eliade, op. cit., p. 210.

² Homeric Hymn, XXVIII: 1.

The most popular foam goddess that we know of, however, is Aphrodite who was described in a different *Homeric Hymn* as having been born from the foam of the sea. So, likewise, much later, when Porphry alluded to her as "the *star* of Aphrodite" who came "from the sea" that was "in constant movement" and thus "foaming because of its commotion."

DIVINE EMASCULATION

It was the visible retraction of proto-Saturn's sustained Birkeland current, the mytho-historical axis mundi, that was said to have been responsible for Aphrodite's birth from foam. As noted in previous volumes of this series, this axial column was inter alia understood as the deity's sexual organ, while its retraction was seen by some as the self-impregnation of the god or his castration.

There are various mythic tales alluding to divine castration, but we shall here restrict ourselves to the one concerning Aphrodite's birth.

First of all, however, it should be noted that Anthony Aveni was entirely wrong when he presented Aphrodite as having sprung "from the sea out of the castrated member of her father Kronos," since the castrated member was that of Ouranos, while it was Kronos who emasculated him.

The correct tale comes from Hesiod's *Theogony* where it is told how it was Kronos who castrated his father Ouranos, whose genitals were flung into the sea where they were surrounded with white foam.⁶

That Ouranos stood for the proto-Saturnian sun previous to its visible change following its flare-up need not be re-stressed. In that respect, his emasculation by Kronos translates as a self castration as it was actually told of the Phrygian Attis,⁷ the Egyptian Ra,⁸ the Indic Rudra,⁹ and Shiva.¹⁰

It was from this foam that Aphrodite was said to have been born. In fact, as Macrobius continued to maintain centuries later, although quite a few mythologists disagree, her name was actually derived from aphros which is the very Greek word for "foam."

As it eventually ended up, the tale of Aphrodite's birth from foam was imbued with additional details in order to make it fit more snugly into the elaborate telling of divine succession. That, after all, was the manner in which the later Greeks collated the disconnected

¹ Homeric Hymn, VI: 4-5.

² Eusebius Pamphili, Evangelicae Praeparationis, XV: 114b-114c.

³ D. Cardona, God Star (Victoria, British Columbia, 2006), pp. 441 ff.

⁴ Idem, Flare Star (Victoria, British Columbia, 2007), pp. 279 ff.

⁵ A. Aveni, Conversing With the Planets (Boulder, Colorado, 2002), p. 62.

⁶ Hesiod, Theogony, 178-208.

⁷ J. G. Frazer, The Golden Bough: A Study in Magic and Religion (abridged edition, London, 1974), p. 457

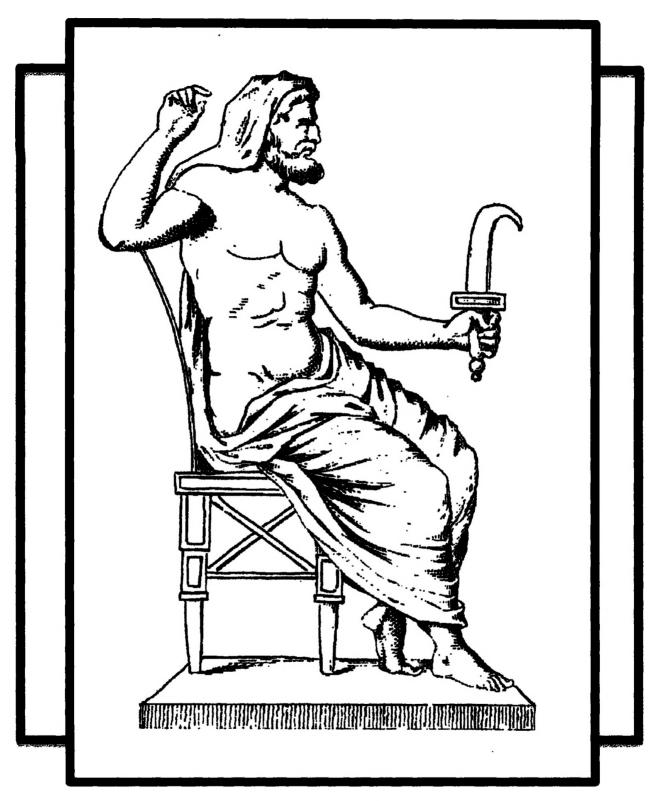
⁸ E. A. W. Budge, An Egyptian Hieroglyphic Dictionary, Vol. I (N.Y., 1920/1978), p. 489.

⁹ W. D. O'Flaherty, *Hindu Myths* (Harmondsworth, 1976), p. 140.

¹⁰ *Ibid.*, pp. 137 ff.

¹ Macrobius, Saturnalia, VIII: 6-7.

² See, for instance, C. Kerenyi, *The Gods of the Greeks* (London, 1981), p. 67; W. Burkert, *The Orientalizing Revolution* (Cambridge, 1992), p. 98.



Kronos holding the sickle with which he castrated Ouranos.

tales that had been told by their predecessors and other nations into a more cohesive narrative. Even so, the tale of Aphrodite's birth from Ouranos' castrated genitals continues to retain more than a kernel of cosmogonic veracity at its very core.

RITUAL CASTRATION

Self-castration was actually adopted in religious fervor among some males in ancient Near Eastern countries. What might, however, be difficult for some to believe is that, in his guidance to those who would listen to him, Jesus is said to have advised men to castrate themselves in order to achieve the kingdom of heaven. This can be found in the *Gospel of Matthew* in which Jesus is made to say: "All men cannot receive this saying, save they to whom it is given," to which he then adds the following:

"For there are some eunuchs, which were so born from their mother's womb: and there are some eunuchs, which were made eunuchs of men: and there be eunuchs, which have made themselves eunuchs [that is who have castrated themselves] for the kingdom of heaven's sake. He that is able to receive it. let him receive it."

There have been many who have attempted to pronounce the passage in question as being nothing but an allusion to celibacy rather than castration. That, however, is negated by the repeated reference to eunuchs.³ As Stephen Patterson correctly argued, what the pertinent passage from the *Gospel of Matthew* really amounts to is that "Jesus advises men (who can) to emasculate themselves!" As he goes on:

"Matthew's eunuchs were clearly the most extreme form of this conviction. Here were men who, in the eyes of their peers, 'became women' in the most graphic and demonstrative way imaginable. They emasculated themselves, removing the thing that ancients [and also moderns] most associated with male power and dominance. This is how they chose to embody the kingdom of heaven on earth."

When it comes to why, Patterson himself supplies the answer:

"Most people [at the time of the writing of the Gospel of Matthew] would have known about eunuchs in the various cults of the Roman east. Mostly they served the Mother Goddess as feminized male priests, no longer male, but more female, like the deity they served."

¹ Mathew, 19: 11.

² Ibid., 19:12

³ See here, for instance, the argument presented by S. Patterson, "Punch Thy Neighbor," *Biblical archaeology Review* (May/June 2015), p. 26.

⁴ Ibid.

³ *Ibid*., p. 66.

⁶ Ibid., (all emphases added); see also Lucian, De Dea Syria, 61 & W. Roscoe, "Priests of the Goddess: Gender Transgression in Ancient Religion," History of Religions, 35 (1996), pp. 195-230, that Patterson himself cites.

The priests of the Phrygian Attis also castrated themselves, but only on entering the service of the goddess Cybele.¹ And, to be sure, there were "other Asiatic goddesses" who were "served in like manner by eunuch priests," such as "the great Artemis of Ephesus and the great Syrian Astarte of Hierapolis...whose unsexed priests resembled those of Cybele."

Worse than that, during the yearly festival of the Syrian Astarte in her sacred city of Hierapolis in Phrygia, that is modern Anatolia, devotees of the goddess that were caught in the religious fervor often went berserk and ended up casting away their garments and castrating themselves in public. Most of them then threw their severed bloody genitals into people's homes, the occupants of which were then required to furnish these religious enthusiasts with female attire and ornaments for them to wear for the rest of their life.³

As James Frazer tells us, however, not everything was always all that well. Once the tumultuous passion of the festival had subsided, quite a few of these momentary fanatics ended up bemoaning their irrevocable sacrifice with which they were encumbered in lifelong sorrow and regret.⁴

As far as priests were concerned, castration was also practiced in Mesoamerica among the Olmecs, Zapotecs, and even Maya.⁵

GOD'S BEGOTTEN DAUGHTER

The evidence for the great goddess having been the child of the Saturnian deity is actually spelled out in no uncertain terms throughout the mytho-history of ancient nations. Quite often, no inferences need be involved since the paternity of the goddess is presented in a very factual manner. Thus, in brief, we can present the following tid-bits.

In a Sumerian hymn, Inanna is clearly made to proclaim that she is her "father Enlil's splendid wild cow."⁶

When it comes to Ishtar, Inanna's Babylonian surrogate, her father is presented under different names which denotes the Saturnian deity's different aspects. In Elam, Ishtar, too, was considered the daughter of Enlil.⁷ But in Uruk, as also elsewhere, she was generally represented as the daughter of Anu.⁸ She was, however, also known as the daughter of Ea.⁹

Ishtar has also been presented by translators of ancient texts, and thus by mythologists, as the daughter of the Moon or Moon-god.¹⁰ That, however, resulted from the misidentification of the god Sin as the deity of the Moon. Thus, as we have already seen, we find Ishtar being

¹ J. G. Frazer, op. cit., p. 458.

² *Ibid.*, p. 460.

³ *Ibid.*, pp. 460-461.

⁴ *Ibid.*, p. 461.

⁵ V. H. Malmström, Cycles of the Sun, Mysteries of the Moon (Austin, Texas, 1997), p. 58.

⁶ T. Jacobsen, The Treasures of Darkness: A History of Mesopotamian Religion (London, 1978), p. 138.

⁷G. de Santillana & H. von Dechend, Hamlet's Mill: An Essay on Myth and the Frame of Time (Boston, 1969), p. 321.

F. Guirand, "Assyro-Babylonian Mythology," New Larousse Encyclopedia of Mythology (London, 1972), pp. 55, 58; S. Dalley, Myths From Mesopotamia (Oxford, 1991), p. 323.

⁹ S. H. Langdon, op. cit., p. 344.

¹⁰ See here, for example, D. A. Mackenzie, op. cit., p. 18.

lauded as the daughter of Sin. That Sin stood for the proto-planet Saturn rather than the Moon, however, we have also already indicated.

Away from Mesopotamia and into Egypt, we find the goddess Hathor being praised as the "lady of heaven, mistress of all the gods, the daughter of Re." More than that, she is actually described as she "who came forth" from Re's body, thus plainly indicating that, as far as the ancients were concerned, she appeared to have been spat out by the proto-Saturnian sun.

³ Ibid.

¹ S. H. Langdon, Sumerian and Babylonian Psalms (Paris, 1909), pp. 192-194; idem, Tammuz and Ishtar (Oxford, 1914), p. 65; J. Gray, Near Eastern Mythology (London, 1969), p. 34; S. Dalley, op. cit., pp. 155, 323 ² J. Burroughs, "The Evil Eye of Apopis," Journal of Egyptian Archaeology, No. 59 (1973), p. 130.

Chapter 29 The Septad

THE ANUNNAKI

n our attempt to cover all pertinent grounds in our reconstruction of the cosmic events that transpired close to Earth during the period we have been covering, we return to the seven windings that developed around the proto-Saturnian orb. Having inter alia been known among the ancients as the Sibitti, which we have already covered above in Chapter 15, they were also designated as the Septad, both of which renditions simply mean the Seven. They were, however, also known as the Anunnaki, said to have been the sons of Anu.2 otherwise known as An, who have been variously numbered, from 50 to 600.3 Although they have been described as "the rebel gods," nothing much can be gleaned from extant texts concerning what they really represented. As Robert Temple noted:

"No certain identification of any important Sumerian god with any one of the Anunnaki exists...In fact, all Sumerologists have been puzzled by the Anunnaki. They have not been 'identified' and no one knows exactly what is meant by them. They recur often throughout the texts, which makes it all the more annoying that nowhere are they explicitly explained."5

Judging by the Atra-hasis Epic, as Kinnier Wilson noted, seven is "probably the original number of the group." In fact, let us cut straight across the lawn as we have often done: That the Anunnaki originally numbered seven can be ascertained from an inscribed tablet that comes from the library of Ashurbanipal in which the entities in question are quite clearly alluded to as "the seven gods" of heaven. They were also known as "the Seven Brothers," and when another deity, such as Nergal, was coupled with them, he was rendered as "the

¹ G. de Santillana H. von Dechend, Hamlet's Mill: An Essay on Myth and the Frame of Time (Boston, 1969), p. 451; J. V. K. Wilson, *The Rebel Lands* (Cambridge, 1979), pp. 38-39.

² R. K. G. Temple, *The Sirius Mystery* (N. Y., 1976), p. 85.

³ S. H. Langdon, Semitic Mythology, Vol. V of C. J. A. MacCulloch (ed.), The Mythology of All Races (N. Y., 1931/1964), p. 94; J. V. K. Wilson, op. cit., p. 35; W. Horowitz, Mesopotamian Cosmic Geography (Winona Lake, 1998), pp. 3-4.

⁴ J. V. K. Wilson, op. cit., pp. 34, 36-37.

⁵ R. K. G. Temple, loc. cit.

⁶ J. V. K. Wilson, op. cit., p. 35.

⁷ A. T. Olmstead, "Ahura Mazda in Assyrian," in J. D. C. Pavry (ed.), Oriental Studies in Honour of Cursetji Erachji Pavry (London, 1933), p. 366; see also R. G. Kent, The Name Ahuramazda, in ibid., p. 206.

⁸ J. V. K. Wilson, *op. cit.*, p. 38.

eighth among the group." Additional to that is the fact that the individual features of each of them were also seven in number.

THE IGIGI

There have been some who have equated the Anunnaki with the similar group known as the Igigi,³ while others have vouched for them as two separate groups,⁴ to say nothing of still others who have understood the two groups as actually opposing one another.⁵ This confusion is not due to a misunderstanding by modern mythologists, but is actually highlighted in ancient sources. Thus, for instance, in the Akkadian epic of Atrahasis, the Anunnaki are said to have allotted work to the Igigi,⁶ which vindicates them as two different groups. In the Babylonian Enuma Elish, however, the two groups are presented as a singular band in one section,⁷ and as two different assemblies in a later segment.⁸

Besides their relation to Anu, whose namesake they actually bear, the association of the Anunnaki with the Saturnian deity can be determined from incantations in which Ninib, the same as Ningirsu and/or Ninurta, whose identity need not be re-stressed, is lauded as their "ruler" or "leader." He is also lauded as the "controller" of the Igigi. 10

In inscriptions of the Assyrian kings Ashurbanipal and Sargon II, we come across a deity that is named Assara Mazaš, which name is now known to be a variation of the Persian Ahura Mazda.¹¹ Much like Anu, this deity was also said to have been attended by the seven Igigi,¹² although, to be sure, there are those who have cast doubt on this declaration.¹³ So, likewise, with the seven Ameša Spentas of the Zoroastrian Avesta.¹⁴

There is nothing in any of these texts that can be utilized to identify the Anunnaki, the Igigi, or the Ameša Spentas, as having been deified meteorites as per Alan Alford, based his theory on the exploded planet hypothesis of Thomas Van Flandern. On the other hand, one may well ask what evidence can be collated to identify these groups of seven as proto-Saturn's evolved encirclements which is what we claim them to have been.

¹ *Ibid*. (emphasis added).

² *Ibid.*, p. 39.

³ G. de Santillana & H. von Dechend, op. cit., p. 297; G. C. Heider, The Cult of Molek (Sheffgield, England, 1985), p. 159.

⁴ S. H. Langdon, loc. cit.

⁵ R. G. Kent, loc. cit.

⁶ S. Dalley, Myths From Mesopotamia (Oxford, 1991), p. 9.

⁷ *Ibid.*, p. 242.

⁸ *Ibid.*, p. 263.

⁹ M. Jastrow Jr., The Civilization of Babylonia and Assyria (London, 1915), p. 198; S. Dalley, op. cit., pp. 205, 326.

¹⁰ Ibid.

¹¹ A. T. Olmstead, op. cit., pp. 368-369.

¹² R. G. Kent, op. cit., p. 206.

¹³ A. T. Olmstead, loc. cit.

¹⁴ A. Pagliaro, "Notes on the History of the Sacred Fires of Zoroastrianism," in J. D. C. Pavry, op. cit., p. 382.

¹⁵ A. Alford, "The Nephilim and the Anunnaki: A New Interpretation of the Biblical and Sumerian Records," in E. Spedicato & A. Notapietro (eds.), Proceedings of the Conference: New Scenarios on the Evolution of the Solar System and Consequences on History of Earth and Man (Bergamo, 2002), pp. 266 ff.

¹⁶ T. Van Flandern, "The Exploded Planet Hypothesis—2000," in *ibid.*, pp. 40 ff.

The problem here stems from the fact that the Mesopotamians—Sumerians, Babylonians, Assyrians, and even the ancient Persians—had no reason to clarify the groups' identity since that, as with various other matters, would have been known to one and all. The evidence for our contention, however, is not lacking.

THE ESAGILA

Besides having originally been seven in number, we read that the Anunnaki were not only deemed to have been the "lords" of the deity's celestial "house," they are said to have been responsible for erecting it. Aspects of Enlil and Ea, whom we have now met more than once, were said to have been enshrined within this "house" that was known, among other designations, as the Esagila.

The Sumerian word esagila really means "temple." The one that the Anunnaki built, however, was said to have equaled Apsu,⁴ the mytho-historical celestial ocean that we have understood as proto-Saturn's circumstellar disk. The shrinking, and yet consolidation, of this disk, as we have seen, entrenched itself on the ancients' minds as the formation of the proto-Saturnian god's abode. That terrestrial temples were built in imitation of this habitat in heaven we have also documented. To quote Giorgio de Santillana and Hertha von Dechend: "Numerous texts and inscriptions show that Enki-Ea, Lord of the Apsu, was responsible for the ground plan of 'temples,' whether celestial or terrestrial ones." Even when it comes to the Old Testament, the plan for the Tabernacle that Moses had the Israelites build in the Desert of Sin was given to him on the Mount of the Law-giving by the god Yahweh himself, as so, also, did David receive the plans for the construction of the temple that his son, Solomon, built from the very hands of the same deity.

QUEEN OF THE SEVEN

Returning now to the goddess whose attributes we have been delineating, we find that she, too, was directly connected with the seven-walled celestial enclosure. In fact, among other things, the goddess was reputed to have been the holy queen of the Anunnaki, which makes her, together with An, the presiding ruler over the seven-walled celestial temple. As Nanshe, the daughter of Enki, she was additionally believed to have been the one who actually drew the plans for the temple in question.

The association of the goddess with the number seven is also indicated in the Hillah Stela on which the Assyro-Babylonian monarch Nabunaid—also rendered Nabonidus—boasts of

¹¹ J. V. K. Wilson, The Rebel Lands (Cambridge, 1979, p. 42.

² Enuma Elish, VI: 60-70.

³ Ibid..

⁴ Ibid.

⁵ G. de Santillana & H. von Dechend, op. cit., p. 301.

⁶ Exodus 25: 8-9, 40.

⁷ I Chronicles, 28: 19.

⁸ T. Jacobsen, *The Treasures of Darkness* (New Haven, 1976), p. 139.

⁹ *Ibid.*, op. cit., pp. 301-302.

having harnessed "the seven lions" for the goddess Ishtar. Elsewhere we also find it written that it was Inanna herself, Ishtar's avatar, who harnessed the seven lions.

According to a certain Egyptian text, Hathor had seven celestial cows for her to protect others with.³ Besides which, the goddess herself was believed to have had seven forms. Thus, in a text contained in a Ptolemaic temple, she is not only addressed as "queen of the gods," but also as "the great lady, the beloved of Ra" in her "seven forms." In another Egyptian myth, Isis, too, was associated with seven life-forms. In this particular case, the goddess was escorted by seven scorpions that were provided by Thoth for her protection.⁵ And, to be sure, among ancient inscriptions, the number seven actually symbolized the goddess Isis, as it also did the Greek Athena.⁷

There is then Aditi who, in one aspect, is "symbolized by the cow that nothing can kill" from which "flow the seven rivers," and, in another, as "the cow of light" who "gives birth to the dawns, the primeval and supreme light made manifest in seven rays." And, as if that is not enough, these lists of seven serve as Aditi's "seven names and seven seats" that end up being "the goddess herself."

Mythologists remain at a loss when they find it stated that the Morning and/or Evening Star, that is the planet Venus, was actually portrayed as having exhibited seven rays.¹⁰

THE CITY OF GOD

As we have seen, the Sebettu—or Sibitti—who were the same as the Anunnaki, were said to have laid the foundation of a celestial enclosure. Among other designations, this enclosure survived in mytho-history as Uruk, which sacred designation was later bestowed on the terrestrial city of that name.¹¹ The celestial Uruk would then have been the same as the Esagila. And to further clinch the matter, as noted on an earlier page, the celestial Uruk was said to have been encircled by seven walls,¹² or to have been laid by the Seven Sages,¹³ which brings us back to the seven encirclements that evolved around the proto-Saturnian orb.

The Esagila, however, has been understood by some to have been more in the nature of a

¹ H. Lewy, "Ištar-Sâd and the Bow Star," Studies in Honor of Benno Landsberger (Chicago, 1965), p. 281.

² J. V. K. Wilson, op. cit., p. 19.

³ R. T. R. Clark, Myth and Symbol in Ancient Egypt (London, 11959/978), p. 188.

⁴ E. A. W. Budge, The Gods of the Egyptians, Vol. I (N. Y., 1904/1969), p. 437.

⁵ A. Lothian, "Tales of Magic and Fantasy," The Way to Eternity (London, 1997), p. 117.

⁶ E. G. McClain, "Structure in the Ancient Wisdom Literature: The Holy Mountain," *Journal of Social and Biological Structures*, Vol. 5, No. 3 (July 1982), p. 245.

⁸ J. Herbert, "Hindu Mythology," in "India: The Eternal Circle," Larousse World Mythology (London, 1972), p. 233.

⁹ Ibid.

¹⁰ F. Cumont, Lux Perpetua (Paris, 1949), pp. 294, 297; R. Van den Broek, The Myth of the Phoenix (Leiden, 1972), p. 15.

¹¹ Sha Naqba Imuru (Epic of Gilgamesh) I: 19.

¹² G. de Santillana & H. von Dechend, loc. cit.

¹³ T. Abusch, "Gilgamesh: Hero, King, God and Striving Man," Archaeology Odyssey (July/August 2000), p. 40.

city, a celestial one, needless to say. That might sound strange to most, but, as David Carrasco indicated, cities originated as "ceremonial centers, with religious symbolism imprinted deeply on their physiognomy and their operation in the hands of organized priesthoods." We, however, can go further by stating, with various others, that cities acted as terrestrial replications of what was seen encircling the proto-Saturnian godhead high in heaven above. In fact, it was the god Saturn that the ancients believed to have been the originator behind the building of cities.

That the model for the cities that resulted in ancient civilizations had originally developed in the sky has been known to researchers of the mytho-historical record for some time. "Not only does a model precede terrestrial architecture," so stated Mircea Eliade, but the model was "situated in an ideal (celestial) region." As Talbott pointed out:

"In dealing with the myths and symbols of the Holy Land one must reckon with the distinction—not always spelled out in ancient literature—between the celestial prototype and the terrestrial copy. Every sacred kingdom or city derives its character from the primeval dwelling, so that whatever was said of the enclosure above was also said of the imitative form constructed by men."

Thus, as Eliade appropriately added by way of an example: "A celestial Jerusalem was created by God before the city was built by the hand of man." And as yet one more example from Mesopotamia, the god Enlil was believed to have existed in a celestial city called Nippur—elsewhere rendered as Nibru—that was destined to serve as the model of the terrestrial city of that name. For that reason, as Hidegard Lewy noted, "Saturn's worshippers believed that their city had been founded by their god as the world's first city." It can therefore be seen that Uruk, mentioned earlier, was not the only ancient city that was constructed after a celestial prototype.

Massive walls encircling ancient cities have been mainly understood as defensive structures. Yet even though there is no doubt that, at a later time, walls did serve to protect

¹ J. V. K. Wilson, op. cit., p. 42.

² D. Carrasco, "Temples of the Depths, Pillars of the Heights, Gates in Between," in D. Ragavan (ed.), Heaven on Earth (Chicago, 2013), p. 447.

³ Diodorus Siculus, *Bibliotheca*, III: 61; Johannes Lydus, *De Mensibus*, as edited by R. Wuensch (Leipzig, 1898), p. 170; R. Klibansky, *et al.*, *Saturn and Melancholy* (London, 1964), p. 134.

⁴ M. Eliade, The Myth of the Eternal Return (London. 1955), p. 8.

⁵ D. N. Talbott, The Saturn Myth (N. Y., 1980), p. 110.

⁶ M. Eliade, *loc. cit.*; see also, D. Cardona, "Bet Shulman," *KRONOS*, Vol. X, No. 2 (Winter 1985), pp. 91-92; L. E. Stager, "Jerusalem as Eden," *Biblical Archaeology Review* (May/June 2000), pp. 36 ff.

⁷ P. Ackerman, "Stars and Stories," in H. A. Murreay (ed.), Myth and Mythmaking (Boston, 1969), p. 99; Ö. Harmanşah, "The Cattlepen and the Sheepfold: Cities, Temples, and Pastoral Power in Ancient Mesopotamia," in D. Ragavan (ed.), Heaven on Earth: Temples, Rituals, and Cosmic Symbolism in the Ancient World (Chicago, Illinois, 2013), pp. 373, 378-379.

⁸ H. Lewy, "Origin and Significance of the Magen Dawid," Archiv Orientalni, 18, py.3 (1950), p. 338.

⁹ See here, for instance, P. James & N. Thorpe, Ancient Inventions (N. Y., 2006), pp. 200 ff.; but see also S. Pollock, Ancient Mesopotamia: The Eden that Never Was (Cambridge, 2004), p.178

cities from invading armies, that does not seem to have been their original function. Take, as yet one more example, the city of Nabada in northern Mesopotamia, calculated to have been built around 2800 B. C. It was constructed as a near-perfect "circular settlement with a diameter of 600 meters" enclosed within "a wall five meters thick, built on a raised embankment." Radiating streets "led to the central mound, on which rose a palace." The entire floor plan represents a central hub surrounded by radiating circles, which ended up being a close reproduction of the city in the sky.

In southern Mesopotamia we also come across the ancient city of Eridu. Yet this, too, was modeled after the celestial city of that same name, which enclosure was also said to have harbored the "seven evil spirits." Even the city of Baghdad was originally built in A. D. 762 as a round city, even though it did not take long to outgrow its walls and turn into one of the largest metropolises of the Near Eastern world.

A Babylonian text claims that Ninurta built a wall, although it is not said that this wall surrounded him. The Phoenicians, however, did believe that Saturn ended up surrounding his abode by such a wall. Now, as it happens, the word for "wall" in various Semitic dialects is a variation of h-y-t—thus hait or hayt in Arabic, and hajt in Maltese—all of which are pronounced as the English "height." The interesting thing about this, however, is that these words all actually mean—or were derived from terms that used to mean—"surround," "encircle," and/or "to encompass." All of which seems to imply that the very word for "wall" originated as the encircling enclosure around what all religions proclaim to have been God or his habitation.

Similar concepts were likewise to be found in ancient Egypt where various localities were named after the mytho-historical celestial fields. In addition to that, there was also the city named Anu, which the Greeks later rendered as Heliopolis, that was to the Egyptians what Jerusalem was to the Israelites and what Mecca remains to the Moslems to this very day. And yet, like most of the cities of the ancient world, this Anu was named in honor of the heavenly city of the same name. As noted in the Coffin Texts, while the "Great God lives, fixed in the middle of the sky," he is yet "the dweller in the city," which marks his city as having been a celestial one.

And so, likewise, in India where royal cities were built after the mythical model of the celestial one in which the Universal Sovereign originally dwelt.¹⁰ As it also happens, the architectural characteristics of these Indian royal cities are neither Islamic nor Hindu but what is known as Vijayanagaran, named after the city of Vijayanagara, the remains of

¹ J. Bretschneider, "Life and Death in Nadaba," Scientific American (Special Edition, March 2005), pp. 54-57.

² W. F. Albright, "The Mouth of the Rivers," The American Journal of Semitic Languages and Literatures (July 1919), p. 166.

³ W. S. Ellis, "The New Face of Baghdad," National Geographic (January 1985), p. 84.

⁴ H. Lewy, op. cit., p. 336.

⁵ Ibid., p. 338; R. Van Over, Sun Songs: Creation Myths From Around the World (N. Y., 1980), p. 189.

⁶ B. Stross, "Paired Sets in the Hebrew Alphabet," AEON, Vol. IV, No. 1 (April 1995), p. 82.

⁷ M. Eliade, op. cit., p. 6.

⁸ E. A. W. Budge, The Book of the Dead (New Hyde Park, 1960), p. 25.

⁹ R. T. R. Clark, op. cit., p. 59

¹⁰ M. Eliade, op. cit., p. 9.

which indicate that it was surrounded by either three or seven circular walls. Of additional interest is the fact that the celestial habitation in which the above-named Universal Sovereign dwelt was originally known as "the iron city of Saturn" who was "enchained by iron rings or shackles" that is now represented by Makara, the Hindu name of the constellation Capricorn.

The realm up above is also envisioned by some Hindus as a multiplicity of heavens that are "surrounded by a sevenfold city wall, a sevenfold ornamental railing, a sevenfold row of tinkling curtains, and beyond these a sevenfold row of Talas-trees" all of which "encircle one another." In fact, according to those who have studied the Hindu *Purānas*, India itself is believed to have a celestial counterpart. There is, of course, no need to point out that all of this was an exaggerated account that accumulated through the years according to the convoluted philosophical rendering that became the very hallmark of Hinduism. But, as can be seen, the sevenfold encirclement of the proto-Saturnian sub-brown dwarf that served as Earth's primordial sun continues to have a hold on religious thought down to the present.

What is also interesting in the present context is that the sixth level of the tell at Hissarlik in Turkey has been identified as the ancient city of Troy, the buildings of which were erected on "ring-like" terraces. Besides which, geophysical investigations in the lower part of this city revealed "artificial ditches hewn out of the bedrock," which ditches "are similarly circular in shape, and arranged around the central temple and palace area. And so, as it has been said, Troy, too, "was actually laid out in a circular fashion."

There is then the Greek city of Thebes that was also said to have been encircled with seven walls. And that Rome, too, had affinities with the celestial city under discussion is evidenced by the fact that its original name was Saturnia, although there is a possibility that all of Italy had once been sanctioned with that name. 10

THE HABITATION OF THE GODDESS

Returning now to our previous subject, we learn that "the city newly founded was given by Saturn to a goddess" one of whose names was Baaltis. Hildegard Lewy tells us that this name means Lady of Byblos, but while she may well have been so considered, the name Baaltis, more properly rendered Ba'altis, is merely the feminine counterpart of Ba'al. What this mytho-historical tit-bit implies, however, is that Venus, as we already know, was placed

¹ A. Verghese, Archaeology, Art and Religion: New Perspectives on Vijayangara (New Delhi, 2001), p.11.

² A. K. Bhattacharyya (ed.), Collected Works of Dr. Benoyrosh Bhattacharyya (Calcutta, 1997), p. 24.

³ W. F. Warren, Paradise Found, (Boston, 1885), p. 132.

⁴ R. L. Thompson, Mysteries of the Sacred Universe (Alachua, Florida, 2000), p. 189.

⁵ E. Zangger, The Future of the Past: Archaeology in the Twenty-First Century (London, 2001), p. 139.

⁶ Ibid.

⁷ Ibid.

⁸ G. S. Kirk, The Nature of Greek Myths (N. Y., 1982), p. 182.

⁹A. Hislop, The Two Babylons (London, 1916), p. 270

¹⁰ Macrobius, Saturnalia, I: 7: 24

¹¹ H. Lewy, op. cit., p. 338.

¹² *Ibid*. pp. 338-339.

within the circumstellar rings that constituted the enclosure surrounding the proto-Saturnian city. Thus the city, or whatever the enclosure was thought of, can be said to have belonged to the goddess as much as it did to her divine father. In fact, Anat herself was actually known as House of the Gods, while a town in what is now Iraq was named after her.

The goddess was so entrapped within proto-Saturn's circumstellar disk that the Persian Aban Yasht names Anahita, whom we have already met, as the actual source of the cosmic ocean.³

Ishtar, too, was directly associated with the cosmic ocean in her laudation as "she who stirs up the apsu before Ea." In stirring up the oceanic Apsu, we actually catch a glimpse of the goddess in the midst of the serpentine fluvial emitted by the proto-Saturnian brown dwarf star. Ishtar's presence in the centre of proto-Saturn's encircling rings is again implied in her description as she who "fills the circle of heaven."

So, too, among the Egyptians who looked upon Hathor as "the face of the sky [and] the deep" who is also "the Primeval Ocean." In fact, not only was Hathor associated with the abode in heaven, but even identified as that very habitation, as one of her names, Het-Hert, amply demonstrates since the name means "House Above." And, to be sure, although Raymond Faulkner has contested it, another of her names, Het-Heru, translates as "House of Horus." A better allusion to Hathor's presence in the centre of proto-Saturn's orb, however, is supplied in a hymn that was written to be sung after death on the soul's journey to heaven in which the goddess in question is referred as she "who dwells in the great Disc." 10

THE CREATRIX

We next turn our attention to the Pelasgian Eurynome who ordered the serpent Ophion to coil seven times around the cosmogonic egg.¹¹ Eurynome herself was claimed to have risen naked from chaos.¹² As others would have it, however, she was the daughter of Ocean,¹³ which amounts to the same thing, since what is meant is the river Okeanos "whose stream bends back in a circle,"¹⁴ very much like the serpent Ouroboros.

Because, according to this myth, all that exists is said to have "tumbled" out of the egg,

¹ W. F. Albright, Yahweh and the Gods of Canaan (N. Y., 1968), p. 226.

² J. Lewy, "The Old West Semitic Sun-God Hammu," *Hebrew Union College Annual*, Vol. XVIII (1943-1944), p. 467.

³ P. Nabarz, "Anahita—Lady of Persia," *Iranian.com* (September 2, 2009), p. 1.

⁴ W. F. Albright, "The Mouth of the Rivers," The American Journal of Semitic Languages and Literatures, Vol. XXXV, No. 4 (July 1919), p. 184.

⁵ S. H. Langdon, *Tammuz and Ishtar* (Oxford, 1914), pp. 169-161.

⁶ R. T. R. Clark, op. cit., p.87

⁷ E. A. W. Budge, The Gods of the Egyptians, Vol. I (N. Y., 1904/1969), p. 428.

⁸ R. O. Faulkner, *The Ancient Egyptian Pyramid Texts* (Warminster, Wiltshire, England, 1969), p. 322.

⁹ E. A. W. Budge, loc. cit.

¹⁰ C. A. Burland, Myths of Life & Death (N. Y., 1974), p. 216.

¹¹ R. Graves, The Greek Myths, Vol. I (Harmondsworth, 1964), p. 27.

¹² Ihid.

¹³ G. de Santillana & H. von Dechend, op. cit., p. 273

¹⁴ Ibid.

Eurynome became known as the Goddess of All Things, and thus—according to some—elevated to the role of Creatrix.

The Finnish Kalevala likewise speaks of Ilmatar, claimed to have been the virgin daughter of the air, who floated for a very long period "on the surface of the waters" until Ukko sent a bird to her who lays seven eggs on her lap. It was out of these seven eggs that "the visible world" is said to have come, ² all of which has also made some think of Ilmatar as a Creatrix.

Although in a previous chapter of this very work we took a stand against Merlin Stone's claim that the original deity of mankind had actually been a female, it has to be admitted that, as indicated above, there have been some who have at least implied that Creation had actually been the work of a goddess rather than a god, even though the god may have existed before the goddess. Moreover, to be sure, such insinuations are not merely due to modern mythologists since some of the ancients did visualize the goddess, under whatever name, as having been the Creatrix of whatever was said to have been created. Among these goddesses we can name the Hassidic Sabbath Queen, "a divine being in her own right," who, in a weekly ritual, comes close to eclipsing God. And this transpires "every Friday night in every synagogue in every part of the world." In fact, the day of Friday has long been considered the day of Venus as the day's Latin name, dies Veneris, rightfully shows. Even the day's English name of Friday is derived from the Anglo-Saxon Frigedaeg—Day of Frige—named after the goddess of that name. In Old Norse this goddess is rendered Frigg by which name the planet Venus—Friggiarstiarna—happens to be called.⁴

There is then the Sumerian Aruru, also known as Mami and Belit-ilani—Queen of the Gods—who was said to have created man.⁵ And yet the very religion that so lauded Aruru also claimed that it was the god Enlil who was "the father of mankind."⁶

The Cypriot Queen of Heaven, known as the Wanasa, identified with Aphrodite by the Greeks and with Venus by the Romans, was honored as "the supreme deity, mistress of all," and the "creator of life and death." Very much as in the case of Allah among Muslims, her worshippers were forbidden to cast images of her and only a standing stone, called a betyl, could be used to represent her.

In a way it can be said that, at least to a certain extent, even the Egyptian Hathor was regarded as a Creatrix. As Wallis Budge informs us, in the theological system of Heliopolis, Hathor became known as the "mother of the light" the "birth of which was the first act of Creation."

Even Aphrodite has been claimed by some to have been "the heavenly goddess of Crea-

¹ R. Graves, loc. cit.

² G. de Santillana & H. von Dechend, op. cit., p. 97.

³ I. Wolfe, "The Effects and Outcome of Cosmic Catastrophes on Human Societies—The Goddess in Religion as Response to Catastrophe," *Chronology & Catastrophism Review* (2008), pp. 17-18.

⁴ All very well known.

⁵ S. H. Langdon, Semitic Mythology, Vol. V of C. J. A. MacCulloch (ed.), The Mythology of All Races (N. Y., 1931/1964), pp. 12-14.

⁶ *Ibid.*, p. 14.

⁷ P. Gaber (with W. G. Dever), "The Birth of Adonis?" Archaeology Odyssey (Spring 1998), pp. 54-55.

⁸ *Ibid.*, p. 55.

⁹ E. A. W. Budge, op. cit., p. 429.

tion." And in India, members of the Śākta cult continue to "worship the supreme deity exclusively as the female principle."

Even the Australian Aborigines are in possession of a myth that specifically names a female entity as the originator of all that came into being. As it continues to be told among the Jawoyn tribe:

"That first time, Creation time, we call Biengana. The first being we call Eingana. We call Eingana our mother. Eingana made everything."

THE SERPENTINE GODDESS

That the female Eingana was a snake need not surprise us since the Jawoyn Aborigines are not the only people who have identified the goddess with a reptile. Take Enheduanna's hymn, The Exaltation of Inanna, as an example, where the goddess is explicitly referred to as having been in the form of a great serpent or dragon. So, likewise, is it declared about Inanna's avatar in a prayer of Ashurbanipal: "Thou, Ishtar, art the fearful dragon of the gods," it is plainly stated in that invocation. It was no different in Phoenicia where Tanit was known as "the one of the serpent" and "the Dragon Lady."

We meet the same situation in Egypt where Hathor is invoked as the Serpent Uraeus. "I have appeared as Hathor, the Primeval, the Lady of All," it is stated in a Coffin Text, "I am the uraeus who lives on truth."

Have we, in fact, not already met Apep, also known as Apophis, he whose tail was in his mouth, the enemy of Ra? As we have already noted, he was spat out, which is what his name actually means. What we should also note, however, is that, according to inscriptions on the walls of the Esna temple, he was spat "into the primeval waters" by the goddess Neith, from which he came into being in the winding form of an intestine.

Even across the ocean among the ancient Mexicans, the "goddess-mother of primitive man" used to be called *Cihua-Cohuatl*, which means "woman of the serpent," while the name of the goddess of the maize, Chicomecohuatl, actually translates as Seven-serpent. 11

In Africa, too, among the Karanga, "Venus was known as Nehanda and accorded the strange ability to transform herself into a serpent." 12

¹ E. G. Suhr, Before Olympos 9N. Y., 1967), pp. 15, 55.

² A. Verghese, Archaeology, Art and Religion: New Perspectives on Vijayanagara (New Delhi, 2001), p. 5.

³ J. Isaacs (ed.), Australian Dreaming (Sydney, 1980), p. 59.

⁴ Exaltation of Inanna, 9-10.

⁵ S. H. Langdon, *Tammuz and Ishtar* (Oxford, 1914), pp. 66-67.

⁶ F. M. Cross, Canaanite Myth and Hebrew Epic (London, 1973), p. 32.

⁷ A. Roberts, *Hathor Rising* (Devon, 1995), p. 8.

⁸ R. O. Faulkner, The Ancient Egyptian Coffin Texts, Vol. I (Oxford, 2004), p. 255.

⁹ E. A. W. Budge, *The Book of the Dead* (N. Y., 1913/1960), pp. 142-143; W. Ward, "The Hiw-Ass, the Hiw-Serpent, and the God Seth," *Journal of Near Eastern Studies* (January 1978), p. 30; F. Fleming, "Order Out of Chaos," in "The Divine Creators," in T. Allan (ed.), *The Way to eternity* (London, 1997), p. 33.

¹⁰ H. M. Westropp & C. S. Wake, Ancient Symbol Worship (N. Y., 1875), pp. 40-41 (emphasis as given).

¹¹ M. Oldfield Howie, The Encircled Serpent (N. Y., 1955), p. 313.

¹² H. von Sicard, "Karanga Stats," as quoted by E. Cochrane, The Many Faces of Venus: The Planet Venus in Ancient Myth and Religion (Ames, Iowa, 2001), pp. 8-9.

All that, however, is merely the tip of the iceberg since the association and/or identification of the goddess with, or as, a serpent stretches all the way back into dim antiquity. As Marija Gimbutas well attested, "the serpent image is found from Çatal Hüyük forward as a spiral or snake motif associated with the Goddess" and "with the 'cosmic waters'."

As a word of caution it should be added that, astronomically speaking, very much as in her father's case, there was more than one serpent, snake, and/or dragon, associated with the goddess. The most prominent of these, however, seems to have been the tail-biting Ouroboros emitted by proto-Saturn that ended up merging with the shrunken circumstellar disk to form the primeval sun's encircling rings. In view of the first appearance of the planet Venus plumb in the middle of the proto-Saturnian orb, the spiraling serpentine ring would have been seen by some as having been emitted by the goddess as much as it seemed to have been emitted by the god.

THE KOSHAROTH

Our exposition of Saturn's sacred number would not be complete without an excursion, no matter how concise it has to be, into the mytho-historical theme concerning the *kosharoth*. This involves the Phoenician Chousor, the same as the Canaanite Koshar, who, as we have seen, very much like the Egyptian Ptah, was believed to have been the fashioner of the cosmogonic egg. As also already indicated, in Ugarit, Koshar was regarded as an alias of the Babylonian Ea,² whose resultant identity as Saturn we have more than once illustrated.

All this is repeated here because there happens to be a derivation from Koshar's name that appears in the Hebrew version of the Old Testament as kosharoth—variously transcribed—which literally means "divine midwives." More than that, a feminine counterpart of Koshar, that is Koshart, served as the goddess of childbirth. And when it comes to the midwives in question, we learn that, according to the Epic of Aqhat, there were actually seven of them.

We also come across these divine midwives in Accadian literature where they are known as Šasurātum.⁶

And so, likewise, according to Philo Byblius, do we find seven divine midwives, known as the Artemides and/or Titinades, in the belief systems of the Classical Greeks.⁷

To my knowledge, nowhere is it said whose birth these seven midwives were involved with, but I do not believe we would be astray were we to nominate the planetary goddess Venus as having been the one.

¹ M. Gimbutas, "The Temples of Old Europe," as quoted by J. K. Hord, "The Twilight of the Goddess: An Ancient Religious Revolution," Comparative Civilization Review (Fall 1987), p. 79.

² W. F. Albright, Yahweh and the Gods of Canaan (N. Y., 1968), p. 136.

³ Ibid.

⁴ *Ibid.*, p. 138.

⁵ *Ibid.*, pp. 138, 143

⁶ *Ibid.*, p. 143

⁷ Ibid.

Chapter 30

Plasmatic Pinches

PLASMASPHERIC CONSEQUENCES

s hinted at the very end of Chapter 27, the association of the radiating light with the various goddesses representing the planet Venus has unfortunately resulted in different hypotheses by different proponents of the proto-Saturnian theory. To an extent this stemmed from one of Wallace Thornhill's most valuable disclosures concerning plasma discharges. What Thornhill proposed was that Venus, newly born, had been the focus of such a discharge. As far as David Talbott was concerned, in addition to what he had already deduced through the message of mankind's mytho-historical record, this disclosure ended up cementing his belief that the primordial flare had actually been discharged by the planet Venus which had then dispatched a stream of luminous material toward the proto-Saturnian orb. It was, according to him, this stretched out material from Venus that illuminated the proto-Saturnian deity's face.

The above concept was more fully explained by Thornhill during a discussion at the Silver Jubilee Event of the Society for Interdisciplinary Studies that took place at Easthampstead Park in September of 1999. As he stated there, the "streamers" from Venus would have followed the "field lines" that would have "curved" away "from Venus toward Saturn." To which he is reported to have added that the Birkeland currents, which is what the streamers would have been, and which would have pinched "more closely at the ionosphere of Venus," would have expanded as they "moved away along the magnetic field lines," only to curve back toward Saturn. As he also elsewhere reported: "Various odd phenomena associated with plasma discharges would have been observed from Earth and should appear in ancient depictions" of the proto-Saturnian Configuration.

And so that there should be no misunderstanding, what Thornhill also stressed is that the appearance of Venus from Earth would not have been as depicted in the mytho-historical record and ancient illustrations had Venus been orbiting proto-Saturn equatorially.⁷

Thornhill is additionally on record in stating that we "should also look at photographs from deep space of 'exploding stars' for clues to the imagery since they are electric discharge

¹ See D. Talbott in "The Saturn Thesis," Part 3, AEON, Vol. IV, No. 6 (May 1997), p. 49.

² *Ibid.*, p. 50.

³ Ibid.

⁴ W. Thornhill, as quoted in the reported discussion in *Chronology & Catastrophism Review* (2000:1), p. 92.

³ Ibid.

⁶ Idem, "Planets, Stars, and Plasma Physics," THOTH—(Internet publication)—Vol. I, No. 1 (January 25, 1997), p. 9.

^{†7} Idem in Chronology & Catastrophism Review (2000:1), p. 92.

phenomena writ large." It is, however, proto-Saturn that had been a star, a brown-dwarf one to be sure, and not Venus, whether newly born or not.

Thornhill and Talbott have both noted the generation of discharge patterns brought about through the injection of electric currents in laboratory focusing devices. The resulting patterns that these devices engender are said to "mimic what we now see in faraway corners of the cosmos." One of these "mimicries" is then compared to the planetary nebula known as NGC 6751. The same lab-produced image has also been compared by them to the radiation associated with the planet Venus. It is, however, doubtful that a planet, under any condition, could ever electrically discharge in the same manner as a stellar planetary nebula while, despite their much smaller mass, brown dwarfs, which is what proto-Saturn originally was, not only can, but actually do.

As noted in one of our previous volumes,³ it was Ralph Juergens who had originally theorized that it was the capture by Earth's present Sun that caused the proto-Saturnian brown dwarf star to electrically discharge.⁴ Although it was many years later, Thornhill picked up on this concept and developed it further,⁵ as so did Donald Scott.⁶ And it is this particular concept that the evidence at our disposal actually supports.

RED LADY OF HEAVEN

It can now be fairly claimed that the planet Venus was first seen by our ancient ancestors plumb in the centre of their primeval sun once the light from this earlier sun's tremendous flare-up had ebbed enough to allow looking at without being blinded. What that means is that Venus was caught between Earth and proto-Saturn, sharing the same rotational axis with the both of them—a situation that came closer to what Frederic Jueneman used to refer to as a planetary shish-kebob.

As noted both in this volume and its prequels, the subdued redness that had cloaked proto-Saturn prior to its electrical discharge had first been rendered a bright purple due to the intense ultra-violet light with which the discharge was imbued. In time, however, proto-Saturn's overall hue seems to have turned into a bright orange and it seems to have been this radical transformation that made Venus appear in contrast against proto-Saturn's newly acquired effulgence. Normally one would think that the much smaller Venus would have looked like a black silhouetted disc against the much brighter proto-Saturnian sphere. There are, however, indications that, at its first appearance, Venus exhibited a reddish hue.

Harking back to one of the earliest civilizations, we learn that the name Ninsianna, the same as Inanna, which we have noted as having been applied to one of the Mesopotamian

¹ Idem, "Planets, Stars, and Plasma Physics," see above, p. 9, p. 9.

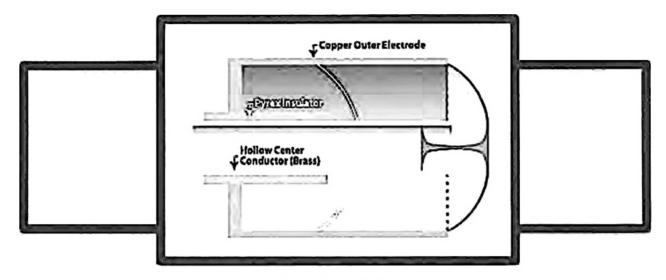
² W. Thornhill & D. Talbott, The Electric Universe (Portland, Oregon, 2007), p. 37.

³ D. Cardona, Flare Star (Victoria, British Columbia, 2007), pp. 261 ff.

⁴ R. E. Juergens, "Juergens Replies" to "The Critics and Stellar Energy," S.I.S. Review, Vol. II, No. 2 (December 1977), pp. 49-50

⁵ W. Thornhill, "Stars in an Electric Universe," AEON, Vol. V, No. 5 (January 2000), p. 48; idem, "The Electric Saturnian System," AEON, Vol. VI, No. 1 (February 2001), p. 39.

⁶ D. E. Scott in D. Cardona, op. cit., pp. 262, 264.



Plasma focus device.

Venus goddesses, actually means "Red Lady of Heaven."

Hildegard Lewy has also noted that the Assyrians referred to Ishtar as Ištar-Sad which translates as the Red Ishtar.² But then, in following Franz Schaumberger, Lewy opted for Ištar-Såd having been Sirius—which received its name from the Arabic al-Schira through the Greek Seiros—rather than Venus.³ Even so, Lewy knew quite well that Sirius had been revered as Venus when Venus was absent from the sky. One of the reasons for this ancient behaviour is said to have been the color red that was applied to Sirius by many an ancient authority. 5 Sirius, however, is really a binary, the two components of which are the massive Sirius A and its much smaller companion Sirius B. As seen in the sky at present, Sirius A appears a brilliant blue-white in color. The dimness from its ancient reddish hue has been attributed to a color-shift that is accounted for by a change in the star's distance from Earth.6 Others have explained the change in color by proposing that the Sirius of the ancient references had actually been the smaller Sirius B that had been a Red Giant that collapsed into a White Dwarf. Most astrophysicists, however, doubt both these explanations while attributing Sirius' ancient red color to a misunderstanding that gathered impetus through the ages. And then, despite Schaumberger's identification of Istar-Sad as Sirius, he could not help commenting on descriptions of "Venus's lively red twinklings." It should also be noted that there seems to be no indication that Ninsianna's name of Red Lady of Heaven was ever applied to Sirius.

W. Heimpel, "A Catalog of Near Eastern Venus Deities," Syro-Mesopotamian Studies (1982), p. 11.

² H. Lewy, "Istar-Sad and the Bow Star," Studies in Honor of Benno Landsberger (Chicago, 1965), p. 274.

³ Ibid.

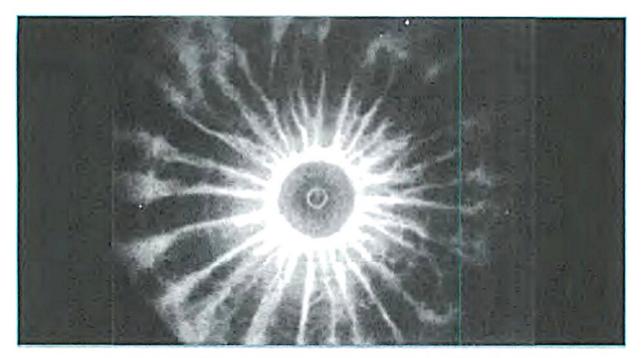
⁴ *Ibid.*, p. 275

⁵ D. E. Scott, *The Electric Sky: A Challenge to the Myths of Modern Astronomy* (Portland, Oregon, 2006), pp. 162-163.

⁶ W. Cruttenden, Lost Star of Myth and Time (Pittsburgh, Pennsylvania, 2006), p. 163.

⁷ *Ibid.*, p. 164.

¹ J. Schaumberger, "Die Hörner der Venus," in F. X. Kugler, Sternkunde und Sterndienst in Babel (1935), p. 303.



Plasma discharge as viewed down the cylinder of a focusing device.

Even when it comes to the planet, as opposed to the goddess, Venus was still described as having been "altogether red-hued." Not only that, but the planet was described as having been located at the zenith of the sky, which position the planet cannot achieve at present, but where it would have been located while sharing proto-Saturn's north celestial occupancy.

In Egypt, Hathor was lauded with the words "O red one." And in India, among Buddhists, the goddess Tara, under the name Tarodbhava Kurukulla, was known to have been "red in colour with red garments and ornaments" and seated "on a red lotus."

Across the ocean in Mesoamerica, the Maya, too, associated the color red with the planet Venus. Thus, the red prefix in Mayan iconography is usually found appended to the Venus glyph, while one of the Mayan names for Venus was chac ek, which means "giant star" but also "red star." However, as Brian Stross indicated, the Tzeltal term tzajal ek also means "red star" without an additional reference to "large," and "presumably" indicates Venus. There is even a prophecy contained in the Book of Chilam Balam that refers to the end of the present era when chak ek, the Red Star, shall return. Slightly further south in Paraguay, the Chamacoco, too, believed that Venus had exuded "a red sparkle."

³ A. Roberts, *Hathor Rising* (Devon, 1995), p. 8.

¹ J. H. Breasted (1921 initiator), Chicago Assyrian Dictionary, Vol. 16, p. 75.

² Ibid.

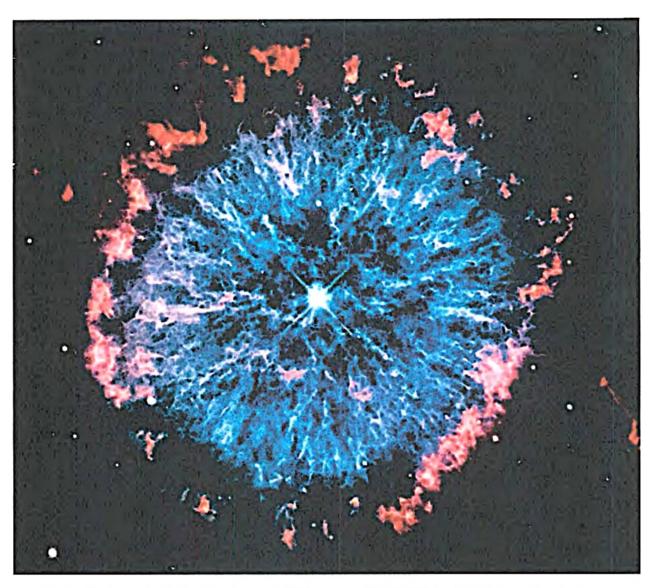
⁴ P. Niyogi, Buddhist Divinities (New Dehli, 2001), pp. 105, 106

⁵ J. E. S. Thompson, Maya Hieroglyphic Writing (Norman, 1971), p. 252

⁶ B. Stross, "Venus and Sirius: Some Unexpected Similarities," KRONOS, Vol. XII, No. 1 (Winter 1987), p. 26.

¹ R. Roys, The Book of Chilam Balam (Norman, 1973), p. 159.

² A. Métraux, "A Myth of the Chamacoco Indians and its Social Significance," *Journal of American Folklore*, Vol. 56, No. 220 (April/June 1943), p. 118.



Stellar discharge (called a planetary nebula) known as NGC 6751 to which lab-produced plasma discharges have been compared.

(Photograph courtesy of NASA.)

Ev Cochrane's unacceptance of chac ek as a reference to the planet Venus, and his choice of Mars as a substitute, constitutes yet another slight disagreement among the proponents of the proto-Saturnian theory. That said, it is not that Mars was not considered to have been reddish in color as, in fact, it still is. As we have seen, however, for that matter, in accordance with other brown dwarf stars, so had proto-Saturn appeared to have radiated a dim red light previous to its flare-up. To be sure, the red Morning Star of the Delaware, Seneca, and Cheyenne Amerinds mentioned by Cochrane did probably refer to Mars rather than Venus, but that will have to await a future volume of this series that will treat of the erratic antics of

¹ E. Cochrane, Starf*cker: The Catastrophic Conjunction of Venus and Mars (Ames, Iowa, 2006), pp. 109, 111.

¹ *Ibid*., p. 108.

the Martian planet. In the meantime, it has to be said that it remains highly unlikely that all traditions ended up mistaking Mars for Venus because of the color that they both originally shared. After all, even the Dogon of Mali, in West Africa, believe that Venus "was blood red when she was created," even though, as they claim, its color soon began to fade.¹

What all the above seems to mean is that Venus did not appear as a dark silhouette against the brightened proto-Saurnian orb because, at its first appearance, it was itself radiating a subdued reddish glow. Not only that, but it obviously was the sudden appearance of Venus in the centre of the proto-Saturnian orb right after the shedding of the light that prompted some of the surviving witnesses to suggest that the light had actually been shed by the goddess, rather than her father, at her birth.

Those who continue to follow the Catholic and other Christian faiths will hate me for pointing this out, but that is why depictions, especially statues, of the Virgin Mother as a young woman are quite often set against a radiating effulgence that sometimes even include a star, or a disk, plumb in the middle of the expanding rays. When all is said and done, the Virgin's images, to say nothing of her history, are nothing but sanctified reflections of the ancient Mother Goddess.

SYSTEMS IN COLLISION

That the goddess Venus in her various embodiments was considered to have been Saturn's daughter fits well with the hypothesis that the planet of that name was somehow generated by the proto-Saturnian brown dwarf star. But although, as we have seen, there have been a few who have seriously considered the ejection of planets from other planets, the majority of astronomers hold tight to an entirely different view. That view, needless to say, is the hypothesis that planets are formed from the detritus that is left surrounding stars following their own formation.

It might not be well known but the basis for the above premise, which eventually became known as the nebular hypothesis, was promoted in 1734 by the Swedish mystic Emanuel Swedenborg, so that it can rightly be stated that, very much like the Big Bang theory, it actually came into being as the child of mysticism. And although it was then taken up in 1755 by Immanuel Kant, it remained in the disputed field of philosophy long before Richard Larson and Frank Shu recast the theory in a firmer scientific mold.

What the nebular theory proposes is that stars are formed out of collapsing clouds of dust and gas, the remainder of which is left to orbit the star. And it is out of this nebulous encirclement that solids are believed to congeal into larger concentrations which continue to coagulate into even bigger pieces that then crash into each other until entire planets end up being formed.

So much for theory, but then, in 1994, the Hubble Space Telescope actually showed that various infant stars in the Orion Nebula were really surrounded by such nebulous encirclements, now referred to as circumstellar or protoplanetary disks, otherwise known as proplyds. Something else was however intimated through the images that were returned by the telescope in question. The circumstellar disks appear to be evaporating.

¹ M. Griaule & G. Dieterlen, Le Renard Pâle (Paris, 1965), pp. 248-249.



Il-Bambina—the young Virgin—set against a flaring star—at Xaghra, Ghawdex—symbolic of the radiating Mother Goddess.
(Photograph by the author.)

"The energetic members of the Orion Nebula's star factory were blowing away the gas and dust that the developing star systems needed to form planets...This makes for a disturbing paradox. Projected mass-loss rates suggest that the proplyds in Orion lose about an earth mass a year...At that rate they will be gone in about 100,000 years."

The problem here is that conventional theorists had been claiming that planets can take up to a million, some even said *ten* million, years to form.²

And then, with the discoveries of extra-solar planets, problems continued to mount and a re-examination of theories, especially in relation to the composition of giant gas planets, started to be proposed. If nothing else, newer studies in 1997 revealed that such planets had to form much faster than theory had dictated.³

The composition of giant gas planets was not, however, the only problem encountered in extra-solar systems. Many of these giant planets hug their stars so closely that they could not be envisioned as having formed in their present location. "The searingly hot stars around which they circle," it has been reasoned, "would have melted their rocky cores before they got started." It has therefore been assumed that these planets were formed much farther away from their host stars and then "barreled inward over millions of years" to end up where we now find them. As it was then asked, "if such chaos characterizes the birth of extra-solar planets, could not similar disorder have reigned closer to home?"

Another admitted "serious challenge to current theories of planet formation" was the surprising discovery that quite a few of these extra-solar planets were "orbiting in the opposite direction to the rotation of their host star—the exact reverse of what is seen in our Solar System," and the reverse of what would be expected if all of them had been formed from the same rotating cloud of stellar debris. The explanation offered was that backward planets can arise through the interference of other giant worlds farther away from the parent star, so that they flip over entirely, resulting in their retrograded tracks.

The biggest problem, however, lies at the very root of the nebular hypothesis, or coreaccretion model as it is also called, and this problem concerns what is known as the aggregation barrier. As it has actually been admitted:

"It is relatively easy to get small pieces of dust to stick together, because of electrostatic forces and van der Waals forces...But once these clumps get much bigger than a centimeter, high-speed collisions result in disintegrations rather than bigger clumps. So modelers have had to come up with ways to get these centimeter-sized clumps to cluster

¹ D. Tytell, "Growing Up in a Rough Neighborhood," Sky & Telescope (April 2003), p. 38.

² Ibid.; R. Jayawardhana, "Planets in Production: Making New Worlds," in ibid., p. 39.

³ A. P. Boss, "Giant Planet Formation by Gravitational Instability," Science (June 20, 1997), pp. 1836-1839.

⁴ J. Glausiusz, "Solar Revisionism," *Discover* (March 2000), p. 54.

⁵ Ibid.

⁶ Ibid.

⁷ H. Boffin, et al., "Turning Planetary Theory Upside Down," eso.org/public/news/eso1016 (April 13, 2010), pp.

^{1,2;} C. Moskowitz, "Weird Alien Planets in Backwards Orbits Explained," Space.com (May 11, 2011).

⁸ Ibid.

together into the larger objects that eventually become comets [and bigger still into planets]"1

In fact when, in 1998, Alan Boss of the Carnegie Institution of Washington attempted to computerize the process in question, rather than coagulating into bigger accumulations, the aggregated clumps simply dispersed.²

Not happy with Boss' results, others twiddled with their computers until they achieved the results they were after, although even these confronted them with yet more surprises. Thus, as Tom Quinn of the University of Washington in Seattle noted in 2002, they eventually ended up with Jupiter-sized planets that formed in just a few hundred years, rather than the theorized millions, which was then said to have been further verified through mathematical computations.⁴

There is also the puzzling situation concerning the separate densities of our Solar System's planets including Earth. The densities of these bodies are so different from one another that several voices contesting the formation from the same circumstellar disk have been raised.⁵

It therefore is no wonder that, during a talk he delivered at the American Astronomical Society's winter meeting in 2011, the exoplanet hunter Geoffrey Marcy found reason to "demolish the prevailing theoretical models for how planets form." Hal Levison, who then hailed from the Southwest Research Institute in Boulder, Colorado, went one better. "These models are crap," he outrightly stated. "They may be the best we can do, but they are still crap."

What is even more surprising is that, despite all the problems mentioned above that call for the elimination of the prevalent core-accretion scenario, the theory, sometimes with some adjustments but most often not, continued to be trumpeted in scientific publications.⁸ Even

¹ E. Hand. "Dinosaur Eggs' Spotted on Rosetta's Comet," ESA/ROSETTA/MPS (December 18, 2014).

² J. Hecht, "Gas Planets Grown in Next to No Time," New Scientist (December 7, 2002), p. 17.

³ Ibid.

⁴ L. Meyer, et al, "Formation of Great Planets by Fragmentation of Protoplanetary Disks," Science (November 29, 2002), pp. 1756-1759.

⁵ W. H. McCrea, "Density of the Terrestrial Planets," Nature (October 4, 1969), pp. 28-29; T. F. Gaskell, *Physics of the Earth* (N. Y., 1970), p. 24; H. Alfvén & G. Arrhenius, *Evolution of the Solar System* (Washington, D. C., 1976.) pp. 25, 28.

⁶ G. Musser, "Why Don't Exoplanets Match Astronomers' Expectations? A Dispatch from the American Astronomical Society Meeting," scientificamerican.com (January 13, 2011), p. 1.

⁷ Ibid.

⁸ T. P. Ray, "Fountains of Youth: Early Days in the Life of a Star," Scientific American (2004 Special edition), p. 15; M. McKee, "Planet Formation is Violent, Slow and Messy," newscientist.com/news (October 19, 2004); T. Appenzeller, "Someplace Like earth/Search for Other Earths," National Geographic (December 2004), p. 79; R. Burnham, "Exoplanet Supports Formation Theory," Astronomy (October 2005), p. 33; k. s. Chadha, "Pulsars Form Planets," Astronomy Now (June 2006), p. 12; D. A. Kring, "Unlocking the Solar System's Past," Astronomy (August 2006), p. 37; "Water Vapor Hints at Planets Forming Around Nearby Stars," Space.com (March 18, 2008), p.1; D. N. C. Lin, "The Genesis of Planets," Scientific American (May 2008), p. 56; R. Jayawardhana, "Are Super-Sized Earths the New Frontier," Astronomy (November 2008), pp. 29, 30; N. Bowdler, "Free-Floating Planets Found With No Star in Sicht," BBC News Science & Environment (May 18, 2011); M. F. A'Hearn, "Comets: Keys to the Solar System's Past," Astronomy (October 2011), pp. 30, 32; R. Irion, "It All Began in Chaos," National Geographic (July 2013).

when it comes to Levison, despite his appraisal of the core-accretion hypothesis as "crap," he still sees the model's failure as being due to implementation rather than its basic principles. The fault, according to him, is not with the model but with the modelers. So, likewise, with Douglas Lin who continues to believe that the "core accretion scenario is a good paradigm to develop the theory of planet formation," but, as he also believes "it needs to become more sophisticated."

While this led to the formulation of newer theories, they all ended up being not that different from the core accretion model. Thus, as a for instance, it was admitted by quite a few investigators that the information gathered by the Dawn spacecraft that was launched in 2007 was enough to "refute the idea that Earth and the other rocky planets condensed slowly and steadily from the cloud of dust and gas that surrounded the infant sun, as some simple models have posited."

"Instead, there was a complex intermediate stage. Much of Earth, particularly its core and mantle, was first forged in protoplanets...that eventually slammed into—and became part of—our nascent world."

And:

"Astronomers estimate that the early solar system probably contained thousands of such protoplanets, each of them perhaps a few hundred miles wide. Most of them collided with larger worlds and were absorbed. Some were shattered into shrapnel."⁵

But when all is said and done, the protoplanets out of which the planets formed, according to this scenario, had still come into being by coagulating out of the gaseous dusty nebula that surrounded the Sun after it itself had developed.

Raymond Lyttleton, on the other hand, proposed exactly the opposite, claiming that the primitive planets thus formed would be torn apart through their own rapid rotations.⁶

"Each planet will [then] divide into two separate main pieces that escape completely from each other, but not necessarily from the sun, and as these escape from one another a stream of much smaller bodies will be drawn out between them like droplets falling from something drawn out of a treacly liquid..."

Some of these droplets are then said to be retained "by the attraction of the adjacent main bodies" to become asteroids and satellites orbiting around them, while others will "become

¹ G. Musser, op. cit., p. 3.

² Ibid.

³ T. Folger, "Mission to the Lost Planet," Discover (September 2012), p. 31.

⁴ Ibid.

⁵ Ibid.

⁶ R. A. Lyttleton, *The Modern Universe* (London, 1961), p. 171.

⁷ *Ibid.*, pp. 171-172.

independent bodies." It was through this process that Lyttleton suggested that Jupiter and Saturn might have split off from a larger body, with Mercury, Venus, Earth, and Mars, "plus a great deal more debris," being some of the droplets generated by this partition, a view that was also adhered to by William Hunter McCrea who, at the time, was England's Astronomer Royal. And it is this particular process that comes the closest to Immanuel Velikovsky's proposition that the planet Venus was ejected by the larger planet Jupiter. As we have, however, indicated, the mytho-historical record is more in favor of Venus having been given birth by the Saturnian deity rather than the Jovian one. But does this *really* mean that the planet Venus was physically cast out of the proto-Saturnian brown dwarf star's interior?

COSMIC CONCEPTION

The feasibility of planetary core ejection has already been discussed in previous pages of this volume. In consideration of what I aim to bring up next, I should, however, add the following by Wallace Thornhill:

"Stars 'give birth' to other stars and gas giant planets by an electrical fission process...known conventionally as a nova. This may explain why so many extra-solar giant planets orbit their parent star so closely. Gas giants begat smaller, denser planets and moons by electrically partitioning their cores where heavy elements have accumulated."

One problem that this raises concerns the following. The ejection of the planet Venus from proto-Saturn is evidenced by its location within proto-Saturn's polar axis, and thus the sharing of its rotation. But Earth, too, was originally positioned within proto-Saturn's polar axis. Should not Earth, therefore, have also been ejected by proto-Saturn? Besides, as some of those who will read these lines already know, Venus and Earth were not the only planets that were similarly located directly in line with proto-Saturn's rotational axis, so that they, too, should be envisioned as having been ejected by the same body. But how many cores could proto-Saturn have ejected? Or, phrased differently, how could a brown dwarf star, or any other form of star, possess more than one core?

A way out of this conundrum has been considered by Thomas Findlay by proposing that what is actually ejected is not the entire core, but only fragments of it.

"The birth of Planets and Moons of different size, mass and type can be considered as being a similar process to that where Stars divest excess electric charge to produce multiple Star systems. In an extension to the proposal that Stars have smaller solid cores, they may also 'shed' some of their electric charge through the process of ejecting fragments of their core material off into space. The production of these fragments,

¹ Ibid.

² Ibid.

³ W. H. McCrea. loc. cit.

W. Thornhill, "The Electric Universe," Chronology & Catastrophism Review (2000:1), p. 80.

together with their cooling and sorting into stable orbits by the EM [i.e., electromagnetic] force, may be the model responsible for how we see the Planets and Moons in our Solar System today."

But, for one thing, is it even known that stars possess *solid* cores? In recent years it has been assumed by orthodoxy that stars consist of "luminous balls of plasma." The core of the Sun, it has likewise been assumed, also consists of plasma. If that is so, stellar cores, too, must be composed of plasma.

One other problem involves the direction in which such bodies are expelled. Together with various others who have accepted the origin of planets through ejection, Kristian Birkeland opted for an expulsion "in the plane of the equator"—in other words, in a lateral, that is orbital, direction. The ejection of cosmic bodies, however, have more commonly been understood to transpire in linear trajectories. That, for instance, is how quasars have been described by some researchers to have come into existence.

"The observation of connecting bridges with a clear 'ejection' structure suggests the equally unorthodox idea that the quasars have been ejected by the central galaxy. The ejection process usually involves shooting pairs of quasars in opposite directions out from the active centre of the galaxy along the pole of the galaxy. Indeed pairs of quasars and the central galaxy often lie on a straight line."

Actually, the concept of linear formation of cosmic bodies is not as unorthodox as Brian Hills intimated in the above. Self-organization is now known to occur in plasmas, and the globular formations that can emerge from such configurations can now be observed in laboratory simulations as well as in actual astrophysical settings. Such globular formations are, for instance, quite observable in the internal structures of newly formed stars known as Herbig-Haro objects. As Nathan Kugland noted:

"We've created a model for exploring how electromagnetic fields help organize ionized gas or plasma in astrophysical settings, such as in the plasma flows that emerge from young stars. These fields help shape the flows and likely play a supporting role alongside gravity in the formation of solar systems, which can eventually lead to the creation of planets like the Earth."

These plasma flows out of which planets eventually develop are what astrophysicists refer

¹ T. Findlay, "Introductory Guide to the Electric Universe," *Proceedings of the Natural Philosophy Alliance*, Vol. 8 (July 2011), p. 206 (capitalizations as given).

² K. Than, "Hot Gas in Space Mimics Life," Space.com (August 14, 2007).

³ J. Achenbach, "The Fourth State of Matter," National Geographic (February 2006), p. 1.

⁴ K. Birkeland, The Norwegian Aurora Polaris Expedition 1902-1903, Vol. I, Sect. 2 (Christiania, 1913), p. 678.

⁵ B. Hills, Origins: Cosmology, Evolution & Creation (Cambridge, 2003), p.15 (emphasis added).

⁶ N. L. Kugland, et al., "Self-Organized Electromagnetic Field Structures in Laser-Produced Counter-Streaming Plasmas," *Nature Physics @ nature.com* (May 30, 2012).

⁷ Report on *ibid.*, "How Order Arises From the Random Motion of Particles in the Cosmos," *sciencedaily.com* (October 4, 2012).

to as astral jets, a lesser formation of which was seen to emanate from proto-Saturn prior to its retraction during its penetration into the Sun's plasmatic domain of influence. More specifically, however, it is through pinches that are created through strong jolts of currents in these plasma flows that plasmoids are first formed, which plasmoids continue to develop into more massive objects. Eventually, even Thornhill came to this realization. "Electromagnetic 'pinch' instabilities along the current filament produce both stars and planets," he found reason to inform the present writer. To which he added that "[S]uch a process matches Alfvén's suggested accretion mechanism and is sufficient to establish gravitational polarization of the bodies formed."

In the meantime, what is known as multilevel dynamical contrasting that has been used to analyze images of Saturn, Venus, and Earth that were obtained by the Voyager 1 spacecraft have shown these planets to be located on linear dusty plasma filaments that are "directed" perpendicular to the plane of the ecliptic. While this has been claimed to corroborate the theoretical accretion of cosmic bodies from dusty plasma, it is included here as a remnant of the primordial linearity of the planets in question.

We are not, however, out of the woods yet.

DATE OF BIRTH

According to Anthony Peratt, the pinched plasmoid that evolved into the planet Venus formed at "the same time as all the others," and that would have included Earth.

The immediate response to that would naturally be that, had that been the case, our ancestors would not have been around to witness the birth of Venus.

What Pertatt had actually claimed, however, is that, while all the pinched plasmoids formed at about the same time at approximately the same size, some accreted more efficiently.⁶ As he then clarified, there is "no reason for a particular plasmoid to condense at the same rate as the others."⁷ To which he later added: "By forming at the same time, I mean that the plasma column started undergoing pinches at the same time." The degree to which the pinches evolved, on the other hand, depended "on the local plasma density, current intensity, temperature," and various other assets that segregated the evolutionary process that ended in the formation of "both plasma giants as well as condensed terrestrial plasmas in the same column." The possibility that the planet Venus could have formed long before human eyes were able to discern it in the centre of proto-Saturn must therefore be considered.

Brown dwarf stars, of which it is now accepted the planet Saturn to have once been, are

A. L. Peratt, Physics of the Plasma Universe (N. Y., 1992), p. 70

² W. Thornhill to D. Cardona, private communiqué (December 8, 2015).

³ Ibid.

⁴ V. A. Rantsev-Kartinov, "Skeletal Structures in the Images of Cosmic Dust Clouds and Solar System Planets," *IEEE Transactions on Plasma Science* (August 2007), pp. 767-770.

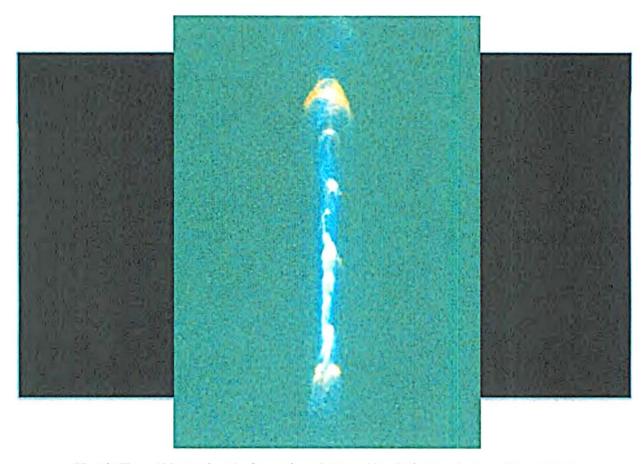
⁵ A. L. Peratt on <u>intersect@yahoogroups.com</u> (December 12, 2001).

⁶ Ibid.

⁷ Idem in ibid. (December 13, 2001).

⁸ Idem in ibid. (September 10, 2002).

⁹ Ibid.



Herbig Haro 111 showing the formation of plasmoids within the pinches of its axial jet. (Image courtesy of ESA.)

actually misnamed since, in essence, they can be as reddish as their red dwarf brethren. Since, at its first appearance, Venus was also said to have been red, it would not have been visible against proto-Saturn's reddish hue. It would only have become visible after proto-Saturn's change into a brighter orb following its flare-up, which flare-up, as we have seen, was by some accredited to Venus.

SURFACE FEATURES

As most of those who have delved into this subject know, there are quite a few aspects of the planet Venus that seem to favor a new formation. One of these aspects is the reported negligible erosion that the planet has been claimed to demonstrate. Photographs of the Venusian surface show some very sharp-edged rocks that surprised investigators at their discovery. As Boris Nepoklonov reported:

"We thought there couldn't be rocks on Venus—they would all be annihilated by erosion—but here they are, with edges absolutely not blunted. This picture makes us

reconsider all our concepts of Venus."1

In fact, it has actually prompted quite a few researchers into claiming that the planet has to be in an "early cool-down phase of evolution." Eric Crew, for instance, envisioned such rocks as stemming from the planet's "recently molten" state. The "dense, windy atmosphere" of Venus, according to Robert Driscoll, would not allow the sharp edges observable in the planet's surface rocks "unless the surface is very young."

The Venusian surface was not considered youthful merely by Velikovsky's supporters and other aficionados, but by conventional astronomers themselves. As it was reported, since "the realization that its surface is relatively young, planetary scientists have yearned to know why and how this happened." What was finally decided on by conventionality is that the rocks on Venus still look sharp-edged because the planet's surface was "reworked" within the last 500 million years or so. To be more specific, it was dictated that the planet had "turned itself inside out." However, as Wallace Thornhill indicated: "There is no satisfactory explanation for a resurfacing event which involved the entire planet."

Rocks are not themselves the only Venusian surface features that have stymied scientists. The planet's craters are also said to be in pristine condition. In view of the planet's claimed youth, that would be understandable since, as Peter Warlow pointed out: "New planets with new surfaces cannot have old craters."

"The craters that do exist [on Venus] do not show any age range. The common assumption that they were formed by asteroid impacts over a long period of time—hundreds of millions of years—just does not fit the facts." 10

Planetary geologists have been said to have an enigma on their hands. When they look at the Venusian surface they do not see a planet "on the brink of adolescence," but "a newborn babe," which appearance is enhanced by what they themselves have described as "the newly minted appearances of the craters" that should have had "plenty of time to fall prey to the ravages of geologic change."

There are then the volcanoes to consider. And here, among those of mountainous proportions, are also "tens of thousands of low dome-shaped" features that comprise "the most abundant geological feature on the planet." Although these domes have been

¹ "Grand Unveiling of the Rocks of Venus," Science News, Vol. 108 (1975), p. 276.

² C. J. Ransom, The Age of Velikovsky (Glassboro, New Jersey, 1976), p. 127.

³ E. Crew, "Troubled Torques," Society for Interdisciplinary Studies Workshop (December 1981), p. 21.

⁴ R. B. Driscoll to C. L. Ellenberger, private communiqué (May 22, 1989).

⁵ D. J. Eicher, "Understanding Our 'Sister Planet'," Astronomy (October 2008), p. 8 (emphasis added).

⁶ W. Thornhill, The Electric Universe: Slide Presentation and Notes (1997), p. 99.

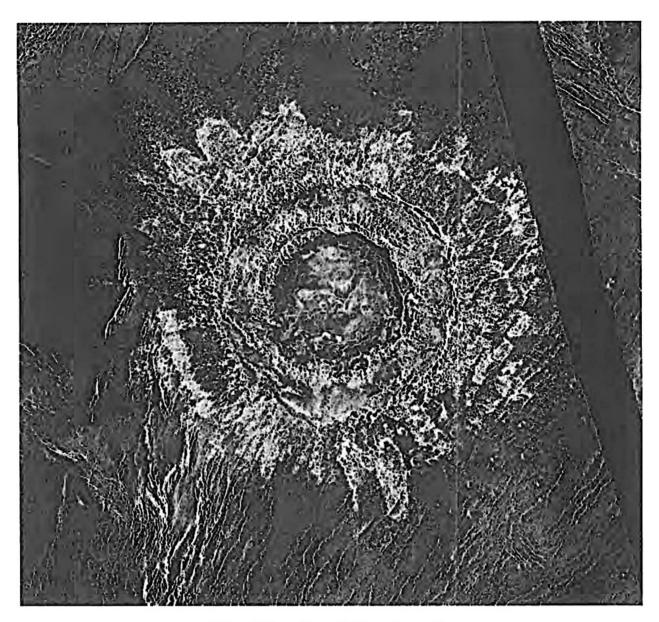
⁷ D. J. Eicher, loc. cit.

⁸ W. Thornhill, "Evidence for the Extreme Youth of Venus," *Chronology & Catastrophism Review* (1993 Special Issue), p. 77 (emphasis added).

⁹ P. Warlow, "Venus: Problem Solving," Chronology & Catastrophism Workshop (2012:1), p. 7. ¹⁰ Ibid.

¹¹ R. A. Kerr, "Venus is Looking Too Pristine," Science (November 16, 1990), p. 912.

¹² J. Ebergart, "The Diminutive Domes of Venus," Science News (June 23, 1990), p. 392 (emphasis added).

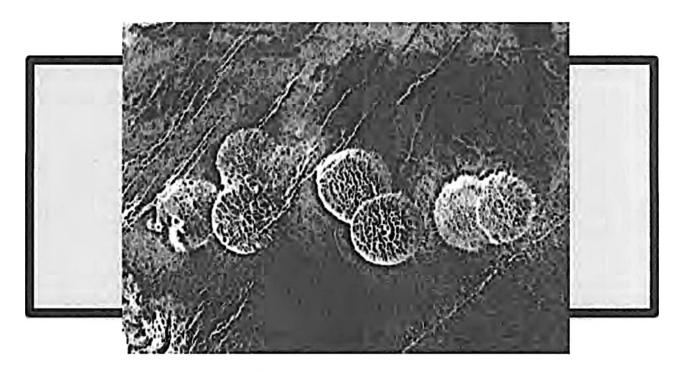


The pristine nature of a Venusian crater. (Photograph courtesy of NASA/JPL.)

considered to be volcanic in nature, their perfect circularity and the web-like patterns that cover them constitute some of the most mysterious geological formations.

ATMOSPHERIC RETENTION

Two of the four terrestrial planets in our Solar System, Mercury and Mars, have so little atmospheric cover that their surfaces are clearly visible through telescopes on Earth. When it comes to Earth, as seen from space, scattered clouds, including hurricanes, tend to temporarily hide some of the areas beneath them from view, but, even then, most of its surface features remain clearly visible through its transparent atmosphere. It is entirely different when



Circular domes said to be volcanic in the Venusian Alpha Regio area. (Photograph courtesy of NASA.)

it comes to Venus since its atmospheric envelope is so dense that none of its surface features are telescopically visible from Earth or even from outer space—see back to page 82. It was thus somewhat laughable when Arthur C. Clarke ventured away from science fiction into proper science to write that, although the composition and pressure of the Venusian atmosphere is not known, "it is certainly at least as dense as Earth's, but probably not so compressed that it would be dangerous to human life."

Harold Spencer Jones, on the other hand, was knighted by the British as the Astronomer Royal. And yet, worse than Clarke, he actually claimed that Venus possesses a lesser atmosphere than Earth.²

As we noted in a previous chapter of this very volume, as it turned out, the pressure that the atmosphere of Venus exerts on its surface is 92, some say 95, times that of Earth, which is equivalently close to the pressure in Earth's oceans at a depth of one kilometer. Thus, the first attempts to touch down on the Venusian surface in the mid 1960s ended with the landers being crushed out of service.

'Some of the gases that were later found to be contained in the Venusian atmosphere continued to astound astronomers to no end. One of these was argon-36 which was believed to be one of the primordial planetary constituents and thus not expected to have survived in large quantities on any of the Solar System planets. Prior Venusian expectations had centered around the same amount of this gas as has survived in Earth's atmosphere, but the results

A. C. Clarke, The Exploration of Space (N. Y., 1951), p. 143.

² H. S. Jones, *Life on Other Worlds* (N. Y., 1952), p. 167.

returned by the Pioneer and Venera probes indicated that argon-36 is far more abundant than it is on Earth, or even Mars for that matter.

"Not only has [Venus] a more massive atmosphere than its own mass and position in the solar system would seem to warrant," wrote Val Axel Firsoff, "but the rare gas abundances in that atmosphere and the ratios of radiogenic to non-radiogenic isotopes of argon in particular appear to indicate that it is a primary atmosphere." Michael McElroy, who was one of the very scientists studying the results returned by the Pioneer probes, stated that "Venus contains as much argon-36 as you would expect to find in the planet's original atmosphere." Peter Gwynne dubbed this a "major mystery that casts some doubt on current theories of the origin of the Solar System." NASA planetologists have been "trying to puzzle out how both planets," that is Venus and Earth, "could possibly have formed at the same time."

COSMIC HELL HOLE

When it comes to the temperature of Venus, Velikovsky had the following to offer:

"The reflecting, absorbing, insulating, and conducting properties of the cloud layer of Venus modify the heating effect of the sun upon the body of the planet; but at the bottom of the problem lies this fact: Venus gives off heat." 5

All of which he explained by stating that: "Venus experienced in quick succession its birth and expulsion under violent conditions" so that "the core of the planet Venus must still be hot."

These comments by Velikovsky instigated a heated and overly prolonged debate that continues to this day. And yet, despite Alfred de Grazia's report to the contrary, and the mistaken belief of most of Velikovsky's followers, the pronouncement that Venus has to be hot preceded Velikovsky since, back in 1947, William Skilling and Robert Richardson had already surmised that the temperature of Venus "may be as high as boiling water."

As it happened, astronomers never gave Skilling and Richardson's evaluation of the heat of Venus much attention, but it was entirely different when it came to Velikovsky. This ensued because, as Velikovsky and his supporters pointed out, the high temperature of Venus that eventually came to light validates his prediction in relation to his concept of a recent Venusian birth, something that astronomers could not accept. And yet, despite their brushing aside of Velikovsky, astronomers were still puzzled by the high temperature of Venus that their instruments kept recording.

¹ V. A. Firsoff, "The Anomalous Condition of Venus and the Origin of the Solar System," S.I.S. Review, Vol. V, No. 2 (1980/81), p. 57.

² As reported in the Washington Post (December 11, 1979), p. A 6.

³ P. Gwynne, "Venus Probes Solar System Birth," New Scientist (December 21/28, 1978), p. 916.

⁴ Ibid.

⁵ I. Velikovsky, Worlds in Collision (N. Y., 1952), p. 371.

⁶ Ihid

⁷ A. de Grazia, *Chaos and Creation* (Princeton, 1981), p. 221.

⁸ C. Wilson & D. Wilson, The Encyclopedia of Unsolved Mysteries (Chicago, 1987), p. 295.

Up until 1959, the Venusian temperature had been estimated to be close to Earth's own 63 degrees Fahrenheit. But then, radar measurements in 1961 supplied a reading of 600 degrees Fahrenheit. A year later, the spacecraft Mariner 2 presented astronomers with a reading of 800 degrees Fahrenheit for the ground temperature of Venus, which temperature was eventually raised to 900 degrees Fahrenheit, higher than the temperature required to melt lead, which radio astronomers from the U. S. Naval Research laboratory stressed was "far hotter than anyone had previously imagined."

Since the Venusian atmosphere had already been known to be much denser than that of Earth, it did not take the proverbial rocket scientist to realize that the amount of solar heat reaching the Venusian surface had to be considerably less than that on Earth. And that, as Firsoff noted, made the high temperature attributed to Venus "wildly improbable unless, of course, Venus has some important source of *internal heat* that is lacking in the Earth." But even then he could not help adding that that "does not appear at all probable."

Years later, astronomical inanities continued to be spouted in a ceaseless determination to invalidate Velikovsky's prediction, even to the point of actually setting up a special conference devoted to that subject by the American Association for the Advancement of Science in 1974, the sole intention of which was to prove Velikovsky wrong.⁴

THE RUNAWAY GREENHOUSE THEORY

What became the general accepted theory accounting for the high temperature of Venus by the scientific establishment is what is commonly known as the greenhouse effect. What this implies is that sunlight filters through the Venusian atmosphere to be absorbed at the surface from where it is radiated back to the atmosphere, the thickness of which, acting as a sort of blanket, keeps the heat from escaping the planet.

This particular theory has for long been associated with Carl Sagan, yet, truth be known, it had been proposed earlier to account for the Venusian atmosphere even before the planet's high temperature had been discovered.⁵ And even then, Fred Hoyle beat Sagan to the punch when he re-introduced the theory in 1955.⁶

What Carl Sagan actually did in 1960 was amend the theory, since not even he could accept it without it being laundered. What he then proposed was that the greenhouse effect had to be an "enhanced" form—later reworded as "runaway"—since, otherwise, it would not have been sufficient to raise the Venusian surface temperature to the degree it had been found to be. What is even more interesting, and highly damaging to Sagan's career, is that, during a 1981 radio interview, he actually claimed to have predicted that Venus would be found to possess a high temperature due to the greenhouse effect he was by then adhered to.⁷

¹ C. Sagan & I. S. Shklovskii, *Intelligent Life in the Universe* (N. Y., 1966), p. 319.

² V. A. Firsoff, *Life*, *Mind and Galaxies* (London, 1967), p. 84 (emphasis added).

³ *Ibid.*, p. 98.

⁴ D. Goldsmith (Ed.), Scientists Confront Velikovsky (London, 1978), in toto.

⁵ P. Warlow, *The Reversing Earth* (London, 1982), p. 186.

⁶ W. Thornhill, "Evidence for the Extreme Youth of Venus," Chronology and Catastrophism review (1993 Special Issue), p. 76.

⁷ C. Sagan on BBC Radio 4 (March 30, 1981) at 9:05 a.m.

In September of 1966, however, Kenneth Kellermann suggested that the planet's heat does not come from the atmosphere above, but from the planet's sub-surface. And so, likewise, with James Hansen and Satoshi Matsushima who pointed out how difficult it would be for solar energy to filter through the planet's thick atmosphere to its surface. What they proposed instead in 1967 was "the possibility of an internal heat source" to provide "the main contribution to the high temperature." Although the internal heat they had in mind was much lower than Velikovsky and his supporters had been calling for, the dust contained in the planet's atmosphere, still according to them, induced an "optical thickness" and an "insulation effect" that helped to accumulate the surface heat and hinder its escape into outer space.

Firsoff was not only still in the game, he was also still as mystified as ever. And yet, despite his own incredulity, he could not help but continue to maintain that the adiabatic atmosphere of Venus "is possible only if it is heated from below." As he went on: "In other words, the surface of Venus would have to be kept at a high temperature by internal sources."

Most of the scientists involved in the debate, however, kept to the runaway greenhouse explanation. As David Morrison claimed during the 1974 conference of the American Association for the Advancement of Science, "independent of the past history of Venus or its present internal temperature, it can be asserted with confidence that sunlight, rather than internal heat, is the dominant source of energy to the Venusian surface and lower atmosphere." As he went on:

"It follows, therefore, that the high surface temperature must result from atmospheric trapping of this heat (the greenhouse effect) and cannot be due to a massive heat flux from the interior as Velikovsky continues to claim."

Back and forth it went. In 1980, Richard Kerr reported that, when the Pioneer probes recorded the amount of radiant energy passing through the planet's atmosphere, "each one found more energy being radiated up from the lower atmosphere than enters it as sunlight."

Fredric Taylor, who then hailed from the Clarendon Laboratory in Oxford, found that Venus radiates 15 per cent more energy than it receives from the Sun and that, in order to keep the planet's surface temperature as constant as it has been, it "must be producing this extra heat from within."

¹ K. I. Kellermann, "The Thermal Radio Emission From Mercury, Venus, Mars, Saturn, and Uranus," *Icarus* (September 1966), p. 479.

² J. E. Hansen & S. Matsushima, "The Atmosphere and Surface Temperature of Venus: A Dust Insulation Model," *Astrophysics Journal*, Vol. 150 (December 1967), p. 1155.

³ *Ibid.*, pp. 1155-1156, but the article—pp. 1139-1157—should be read in toto.

⁴ V. A. Firsoff, *The Interior Planets* (London, 1968), p. 103.

⁵ Ibid.

⁶ D. Morrison, "Planetary Astronomy and Velikovsky's Catastrophism," in D. Goldsmith (Ed.), op. cit., pp. 165-166.

⁷ Ibid., p. 166; idem "On Morrison: Some Final Remarks," KRONOS (Winter 1980), p. 67; see also, R. C. Cowen, "Velikovsky: His Theory Lives On (Unfortunately)," The Christian Science Monitor (September 3, 1980), p. 16; L. M. Greenberg & C. L. Ellenberger, "Venus's Infernal Heat," KRONOS (Winter 1981), pp. 18-24.

⁸ R. A. Kerr, "Venus: Not Simple Or Familiar, But Interesting," Science (January 18, 1980), p. 292.

¹ Editorial team, "The Mystery of Venus's Internal Heat," New Scientist (November 13, 1980), p. 437.

"All the inner planets, including the Earth, produce internal heat from radioactive elements in their rocks. But Taylor's observations of Venus would mean that the planet is producing almost 10,000 times more heat than the Earth—and it is inconceivable, according to present theories of planetary formation, that Venus should have thousands of times more of the radioactive elements than the Earth."

Having presented his views at the meeting of the Royal Society in November 1980, Taylor was met with skepticism, "not to say sheer disbelief," by most other planetary scientists.² And yet other scientists continued to echo the same credo, as note the following by Andrew Ingersoll and Judith Pechmann:

"If all observations are correct and the probe sites are typical of the planet, the second law of thermodynamics requires that the bulk of the lower atmosphere heating must come from a source other than direct sunlight or a thermally driven atmospheric circulation. Neither the so-called greenhouse models nor the mechanical heating models are consistent with this interpretation of observations."

Concerning which they were honest enough to state that they "cannot claim to understand the high surface temperatures of Venus," and that, if the data returned by the probes is not in error, "another source of energy for the deep atmosphere" is called for, examples of which would include an "internal heat source."

None of the above seems to have impressed NASA scientists who claimed that, using spacecraft data, "a team of scientists has *virtually proved*" that the searing temperature of Venus "is due to an atmospheric greenhouse effect."⁵

But then notice what Hans Nieper claimed four years after that: "[The] theory of the greenhouse effect for explaining the Venus temperature was discussed for many years, and eventually considered untenable, and given up." Fair enough, this came from an authority who risked venturing outside his medical field and who was, at least to some, just as controversial as Velikovsky had been. Besides which, Nieper had his own theory involving the so-called tachyon field, which we shall not here go into, to promote in this respect. But it does point to the wide extent in which the debate on the heat of Venus had spread.

In the end, the greenhouse theory saturated scientific literature and thus entrenched itself in most scientific minds as an established fact. And yet, it is not as if the problems that encumbered the theory had all been solved. As *Science News* continued to report toward the

¹ Ibid.

² Ibid.

³ A. P. Ingersoll & J. B. Pechmann, "Venus Lower Atmosphere Heat Balance," *Journal of Geophysical Research* (December 30, 1980), p. 8219.

⁴ *Ibid*., p. 8222.

⁵ NASA News Release, "Searing Venus Surface Heat is Caused by Greenhouse Effect," (April 6, 1981, emphasis added)

⁶ H. A. Nieper, Revolution in Technology, Medicine and Society (Oldenburg, Germany, 1985), p. 42 (emphasis added).

¹ See, for example, R. Kunzig, "Voyage to Venus," Discover (April 1989), p. 55.

end of the twentieth century, the "absence of water vapor above Venus' cloud banks mystifies scientists because models of the planet's strong greenhouse effect suggest that [water] vapor plays a key role in maintaining the warming." And yet, the search for such vapor "has come up dry." Of course there have been those who claimed that Venus once did have water—even oceans—but, through different means according to different authorities, it eventually lost all the water it once contained. Firsoff, however, disagreed, claiming that the proposed mechanism through which Venus lost its water is, at best, unconvincing. Besides which, as James Oberg noted in opposition to those who were calling for past Venusian oceans, "Venus may never have had much water."

Actually, as Zdenek Kopal stressed, were one to keep to the mainstream belief that Venus formed within the Solar System hundreds of millions of years ago, a "fatal flaw" raises its ugly head. And that involves what he called the "implicit assumption" that the Sun at that time could have been as bright, and as hot, as it is at present in order to bestow the needed heat for a greenhouse effect on any of its planets.⁶

IN ADDENDA

Entire books can be written about the debate concerning the youth of the planet Venus, but, in the present study, a line has to be drawn somewhere. Nor must it be understood that what has been stated above tends to validate Velikovsky's particular scenario of colliding worlds. Thus, for one thing, as we have seen, he was in error when he claimed Venus to have been the planet Jupiter's progeny. And, for another, he was just as much in error in his belief that Venus would have come into being as recently as 3,500 years ago or, for that matter, as he once mis-claimed, as long as "millions" of years ago. What he was correct about, as Thornhill stressed, was his belief that Venus is a new planet. Yet even that did not originate with him since, as early as 1823, Johann Radloff had proposed that Venus developed out of one of the fragments that splintered from the rupture of a large planet that was struck by an errant comet. And since, very much like Velikovsky, he also claimed that this event was witnessed by some of our ancient ancestors, the planet, according to him, cannot be older than *Homo sapiens* and thus qualifies as a new planet.

It might now be argued by some that sharp-edged rocks on the Venusian surface do not validate the planet's recent birth since various rocks on Earth, which is taken to be much

¹ R. Cowan, Science News (September 14, 1991), p. 167.

² Ibid.

³ D. F. Robertson, "Parched Planet," Sky & Telescope (April 2008), p. 29; C. Q. Choi, "Venus Gets Weirder: CO2 Oceans May Have Covered Surface," Space.com (December 28, 2014).

⁴ V. A. Firsoff, "The Runaway Greenhouse in the Venus Atmosphere," *Astronomy and Space* (N. Y., 1973), p. 222.

⁵ J. Oberg, "Venus," Astronomy (August 1976), p. 16.

⁶ Z. Kopal, The Realm of the Terrestrial Planets (N.Y., 1979), p. 193.

⁷ Anonymous, "The Catastrophic Worlds of Immanuel Velikovsky," Science & Mechasnics (July 1968), p. 103.

⁸ W. Thornhill, in the Letters section, Chronolohy & Catastrophism Workshop (2007: 2), pp. 4-5.

¹ R. van der Sluijs, "Johann Radlof: The Father of Planetary Catastrophism," in I. Tresman (ed.), Quantavolution: Challenges to Conventional Science (Sandbach, Cheshire, England, 2010), pp. 342-343.

older, also tend to display a certain amount of sharpness. Terrestrial rocks, however, are prone to fracture in vast areas due to the drifting and buckling of continental plates while the Venusian geological structure shows no signs of past or present plate tectonics. And this, in turn, makes it difficult to visualize how Venus could have turned itself inside-out as it has been claimed by some. Besides which, in the absence of plate tectonics, it is just as difficult to imagine how the planet's deep windy atmosphere could have failed to erode the rocks' sharp edges. Fair enough, the tremendous winds on Venus do drop in speed at the planet's surface, but they can still kick up dust and even push small stones around which would have been enough to erode sharp rock edges in much less than the millions of years that have been claimed for the planet's age.

Pristine craters, on the other hand, should not be seen as all that strange since recent impacts, if that is what the craters portend, are not impossible in an older terrain if Venus is not really all that new. And so, also, one might say, when it comes to volcanoes. Earth, too, was much more volcanically active in its past—but not to the same amount as Venus. As Jayne Aubele from Brown University reported: "The presence of tens of thousands of Volcanoes [on Venus] overwhelms me."

What really clinches the matter, however, is the retention of such a dense atmosphere. For years Venus had been proclaimed to be Earth's twin, yet Earth's atmospheric envelope is nowhere near as dense as the Venusian one. Had Venus really been around for the millions of years it has been vouched to have existed, it's atmosphere should have thinned out much like Earth's. And even under the theory we have been propounding in this volume and its prequels, the Venuisian atmosphere, very much like Earth's, should have suffered frequent dispersals through proto-Saturn's recurrent flare-ups. Such a dense atmosphere should therefore have thinned out had it existed as long as Earth.

Even so—and this has to be stressed—does the above really mean that man witnessed the actual birth of the planet Venus? The answer here is not that easily resolved. What our ancient ancestors witnessed was the first appearance of the planet Venus, which is not the same thing. As already noted, having originally been red, Venus would have been rendered invisible against proto-Saturn's own original reddish hue had it already been there prior to proto-Saturn's flare-up.

One other thing to stress here is that the reddish color that ancient man attributed to the planet Venus at its first appearance could not have been due to the dull rusty hue that some have attributed to its surface. Had that been the case, as already noted, Venus would have appeared as a black silhouette against proto-Saturn's glowing disk both before and following its flare-up. As already noted, the reddish hue attributed to Venus at its first appearance had to have been due to an actual glow. It has in fact been stated that, even at present, rocks on the night side of Venus are still hot enough to appear to glow a subdued red. As reported by the Mohawk Valley Astronomical Society, at night, the Venusian surface takes on an increasingly reddish glow with the rocks appearing "to be glowing a dull red like hot coal." It therefore

¹ J. Eberhart, "The Diminutive Domes of Venus," Science News (June 23, 1990), p. 392.

¹ W. Thornhill, "Evidence for the Extreme Youth of Venus," Chronology and Catastrophism Review (1993 Special Issue), p. 85.

² P. Pezzolanella, "The Glows of Venus," Mohawk Valley Astronomical Society (April 2005).

seems to have been this glow that rendered the planet visibly red against proto-Saturn's brightened disk. Thus, although Peter Warlow was not involved in the proto-Saturnian configuration's reconstruction, he still had the following to offer:

"The present [Venusian] temperature is just below the threshold of visibility. When the surface was hotter...the planet would have been seen to glow red. The surface would not have been seen directly, but the gases...would be lit by the glow from the surface. The object would have been a phenomenal sight. Indeed, it was a phenomenal sight. It is so described in the ancient legends of mankind."

The only item that will probably never be solved is exactly how long the fully developed Venus, even if still glowing, had been axially stationed beneath proto-Saturn's southern pole, above Earth's northern one. One thing that can, however, be said is that the goddess of that planet, the newly-apparent daughter of the proto-Saturnian deity, did not take long to bear an offspring of her own, a sacred son who was soon to challenge his own father.

Stay tuned.

¹ P. Warlow, "Venus: Problem Solving," Chronology & Catastrophism Workshop (2012:1), p. 7.

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ABOUT THE AUTHOR

Dwardu Cardona was born, raised, and educated in Malta, Europe, from where he emigrated to Canada in 1959. Less than a year later, in mid-1960, he became involved in the study of catastrophism and the reconstruction of the Solar System's cosmic history. He has since then acted as a Contributing Editor for KRONOS (1975-1978) and, later, as a Senior Editor for the same periodical (1979-1988) and, later still, as the Editor for AEON (1995-2006). He was one of the Founding Fathers behind the Canadian Society for Interdisciplinary Studies (now defunct), and has acted as a consultant on mythology and cosmogony for Chronology and Catastrophism Review, the official organ of the British-based Society for Interdisciplinary Studies. He has also acted as the Editor for the Osiris Series of books sponsored by Cosmos & Chronos.

As a writer, Cardona has now published well over a hundred articles in various periodicals, most of them on the subject that is covered in more detail in his present series of books: *God Star* (2006), *Flare Star* (2007), *Primordial Star* (2009), and *Metamorphic Star* (2011), all of which, in the indicated order, actually form the consecutive prequels to the present work.

Cardona has lectured at the University of Bergamo, in Italy, and at various organizations in England, Canada, and the United States.

He presently makes his home together with his wife in Vancouver, British Columbia, Canada.